

FILE 'REGISTRY' ENTERED AT 12:04:25 ON 28 NOV 2007

L1 STRUCTURE UPLOADED
L2 50 S L1
L3 STRUCTURE UPLOADED
L4 50 S L3
L5 STRUCTURE UPLOADED
L6 7 S L5
L7 5095 S L5 SSS FULL
L8 STRUCTURE UPLOADED
L9 26 S L8
L10 92 S L8 SUB=L7 FULL
L11 STRUCTURE UPLOADED
L12 733 S L11 SUB=L7 FULL
L13 4362 S L7 NOT L12
L14 5003 S L7 NOT L10
L15 4356 S L13 NOT L10
L16 STRUCTURE UPLOADED
L17 266 S L16 SUB=L15 FULL
L18 STRUCTURE UPLOADED
L19 3591 S L18 SUB=L15 FULL
L20 765 S L15 NOT L19
L21 STRUCTURE UPLOADED
L22 3864 S L21 FULL SUB=L15
L23 492 S L15 NOT L22

FILE 'CAPLUS' ENTERED AT 12:29:58 ON 28 NOV 2007

L24 42 S L23
L25 5 S L24 AND (PY<2003 OR AY<2003 OR PRY<2003)

FILE 'REGISTRY' ENTERED AT 13:05:48 ON 28 NOV 2007

L26 STRUCTURE UPLOADED
L27 0 S L26
L28 103 S L26 SSS FULL
L29 STRUCTURE UPLOADED
L30 101 S L29 SUB=L28 FULL
L31 2 S L28 NOT L30
L32 STRUCTURE UPLOADED
L33 144279 S 32 SUB=L28
L34 100 S L32 SUB=L28 FULL
L35 3 S L28 NOT L34

FILE 'CAPLUS' ENTERED AT 13:10:32 ON 28 NOV 2007

L36 2 S L35
L37 172 S L20
L38 29 S L37 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> file registry
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:04:25 ON 28 NOV 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 27 NOV 2007 HIGHEST RN 956075-61-9
DICTIONARY FILE UPDATES: 27 NOV 2007 HIGHEST RN 956075-61-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

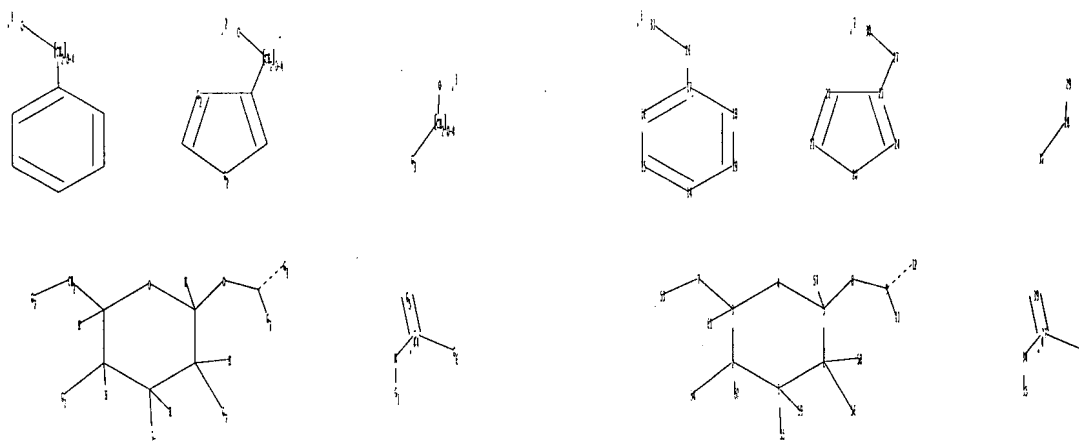
TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>
Uploading C:\Program Files\Stnexp\Queries\10524048verify.str



chain nodes :

7 8 9 11 12 26 27 28 29 30 31 32 34 35 37 39 41 53 54 55 56
57 58 59 60 61

ring nodes :

1 2 3 4 5 6 14 15 16 17 18 19 20 21 22 23 24

chain bonds :

1-55 1-59 2-54 2-60 3-7 3-61 5-8 5-57 6-56 6-58 7-53 8-9 9-11 9-12
17-26 23-27 26-31 27-30 28-29 28-32 34-35 34-37 37-39 37-41

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19 20-21 20-24
21-22 22-23 23-24

exact/norm bonds :

1-2 1-6 1-55 1-59 2-3 2-54 2-60 3-4 3-7 3-61 4-5 5-6 5-8 5-57 6-56
6-58 7-53 8-9 9-11 9-12 17-26 20-21 20-24 21-22 22-23 23-24 23-27 26-31
27-30 28-29
28-32 34-35 34-37 37-39 37-41

normalized bonds :

14-15 14-19 15-16 16-17 17-18 18-19

G1:C,H

G2:C,N

G3:O,N

G4:C,S,P

G5:O,S

G6:C,O,N

G7:OH, [*1], [*2], [*3], [*4]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 11:CLASS
12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom
22:Atom 23:Atom
24:Atom 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS
34:CLASS 35:CLASS
37:CLASS 39:CLASS 41:CLASS 53:CLASS 54:CLASS 55:CLASS 56:CLASS 57:CLASS
58:CLASS 59:CLASS
60:CLASS 61:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 12:04:55 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 19897 TO ITERATE

10.1% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

50 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 389495 TO 406385

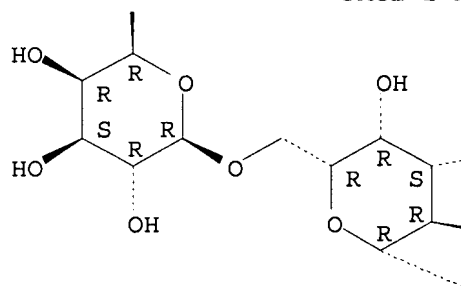
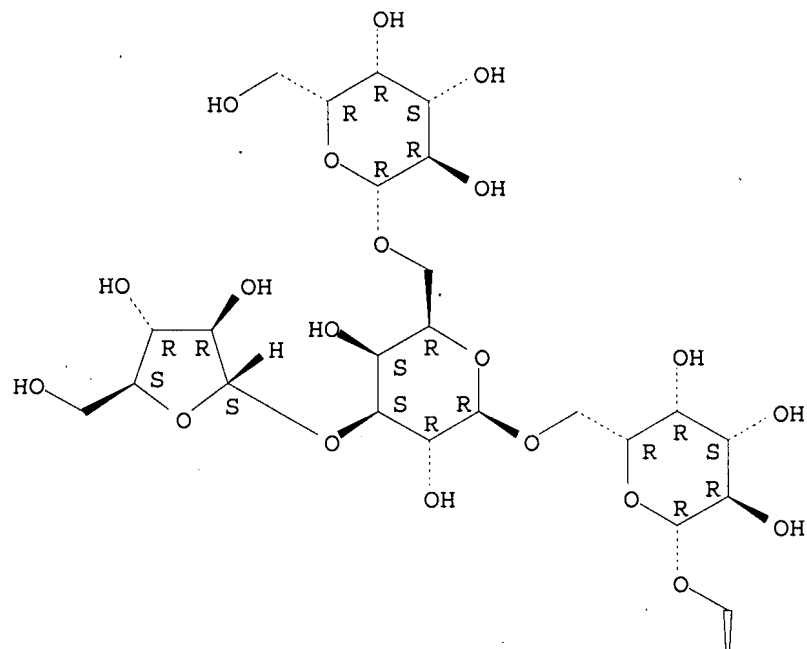
PROJECTED ANSWERS: 36157 TO 41441

L2 50 SEA SSS SAM L1

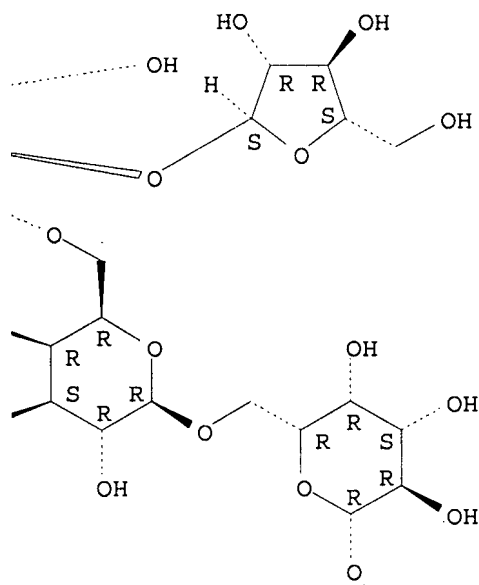
=> d l2 scan

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN β -D-Galactopyranoside, 4-methoxyphenyl [O- β -D-galactopyranosyl-
(1 \rightarrow 6)-O-[α -L-arabinofuranosyl-(1 \rightarrow 3)]-O- β -D-
galactopyranosyl-(1 \rightarrow 6)-O- β -D-galactopyranosyl-(1 \rightarrow 6)-O-
 β -D-galactopyranosyl-(1 \rightarrow 6)-O-[α -L-arabinofuranosyl-
(1 \rightarrow 2)]-O- β -D-galactopyranosyl-(1 \rightarrow 6)-O- β -D-
galactopyranosyl-(1 \rightarrow 6)]2-O- β -D-galactopyranosyl-(1 \rightarrow 6)-O-
[α -L-arabinofuranosyl-(1 \rightarrow 3)]-O- β -D-galactopyranosyl-
(1 \rightarrow 6)- (9CI)
MF C122 H198 O97

Absolute stereochemistry. Rotation (+).

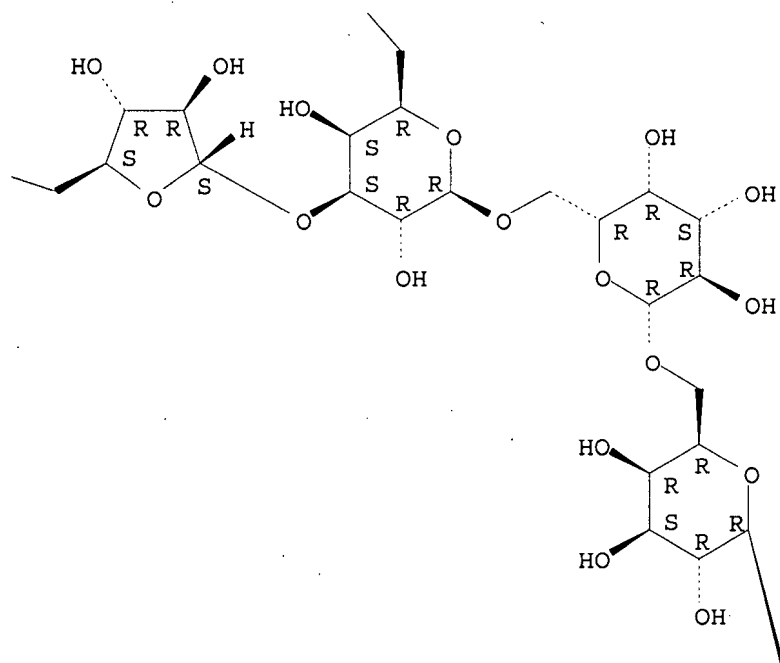


PAGE 2-B

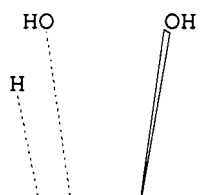


PAGE 3-A

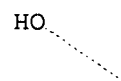
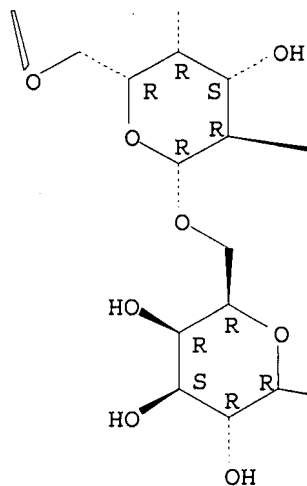
HO—



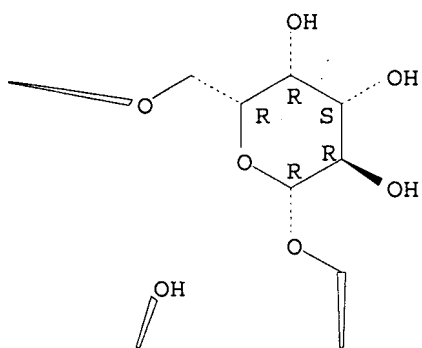
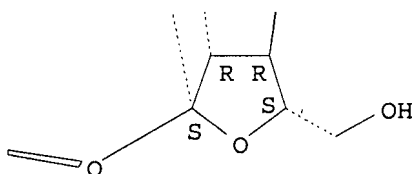
OH

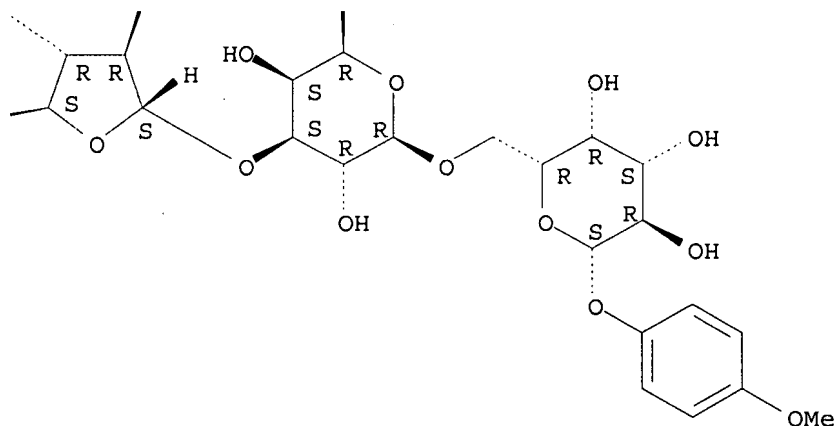
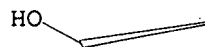


PAGE 4-B



PAGE 4-C



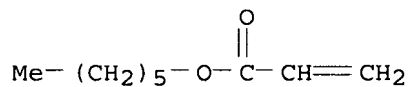


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN D-Glucitol, 1-deoxy-4-O-β-D-galactopyranosyl-1-[(2-methyl-1-oxo-2-propenyl)amino]-, pentaacetate (ester), polymer with hexyl 2-propenoate (9CI)
 MF (C26 H39 N O16 . C9 H16 O2)x
 CI PMS

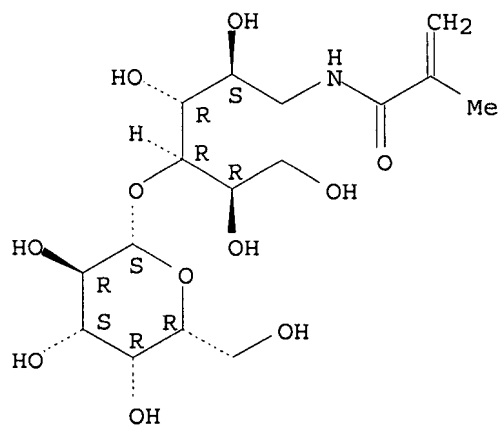
CM 1



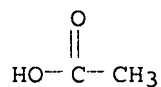
CM 2

CM 3

Absolute stereochemistry.



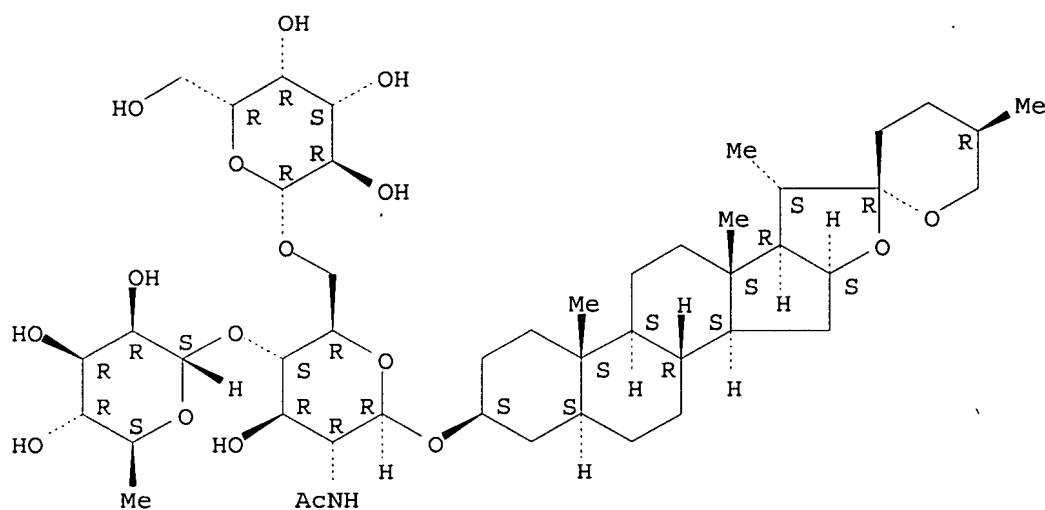
CM 4



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN β-D-Glucopyranoside, (3β,5α,25R)-spirostan-3-yl
 O-6-deoxy-α-L-mannopyranosyl-(1→4)-O- [β-D-
 galactopyranosyl-(1→6)]-2-(acetamino)-2-deoxy- (9CI)
 MF C47 H77 N O17

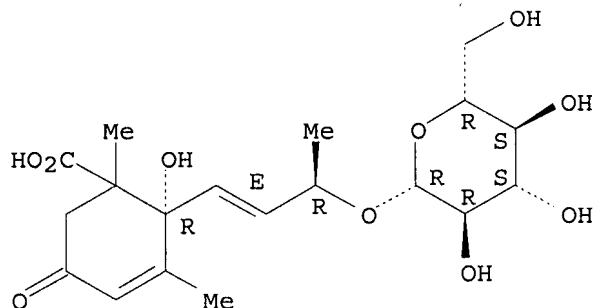
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN 3-Cyclohexene-1-carboxylic acid, 2-[(1E,3R)-3-(β-D-glucopyranosyloxy)-
 1-butenyl]-2-hydroxy-1,3-dimethyl-5-oxo-, (2R)- (9CI)
 MF C19 H28 O10

Absolute stereochemistry.
 Double bond geometry as shown.
 Currently available stereo shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.90

1.11

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 12:05:33 ON 28 NOV 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *

SESSION RESUMED IN FILE 'REGISTRY' AT 12:12:09 ON 28 NOV 2007

FILE 'REGISTRY' ENTERED AT 12:12:09 ON 28 NOV 2007

COPYRIGHT (C) 2007 American Chemical Society (ACS)

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

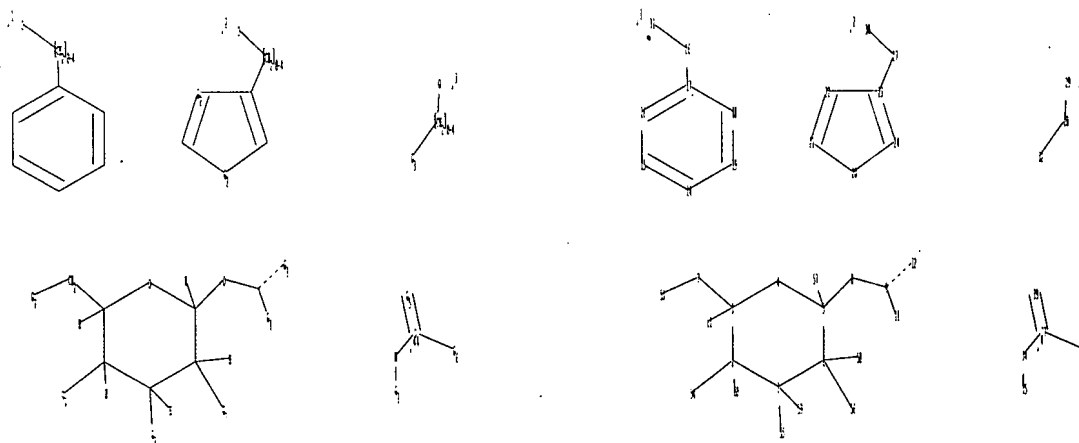
FULL ESTIMATED COST

0.90

1.11

=>

Uploading C:\Program Files\Stnexp\Queries\10524048verify.str



chain nodes :

7 8 9 11 12 26 27 28 29 30 31 32 34 35 37 39 41 53 54 55 56
57 58 59 60 61

ring nodes :

1 2 3 4 5 6 14 15 16 17 18 19 20 21 22 23 24

chain bonds :

1-55 1-59 2-54 2-60 3-7 3-61 5-8 5-57 6-56 6-58 7-53 8-9 9-11 9-12
17-26 23-27 26-31 27-30 28-29 28-32 34-35 34-37 37-39 37-41

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19 20-21 20-24
21-22 22-23 23-24

exact/norm bonds :

1-2 1-6 1-55 1-59 2-3 2-54 2-60 3-4 3-7 3-61 4-5 5-6 5-8 5-57 6-56
6-58 7-53 8-9 9-11 9-12 17-26 20-21 20-24 21-22 22-23 23-24 23-27 26-31
27-30 28-29
28-32 34-35 34-37 37-39 37-41

normalized bonds :

14-15 14-19 15-16 16-17 17-18 18-19

G1:C,H

G2:C,N

G3:O,N

G4:C,S,P

G5:O,S

G6:C,O,N

G7:OH, [*1], [*2], [*3], [*4]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 11:CLASS
12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom
22:Atom 23:Atom
24:Atom 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS
34:CLASS 35:CLASS
37:CLASS 39:CLASS 41:CLASS 53:CLASS 54:CLASS 55:CLASS 56:CLASS 57:CLASS
58:CLASS 59:CLASS
60:CLASS 61:CLASS

L3 STRUCTURE UPLOADED

=> s l3

SAMPLE SEARCH INITIATED 12:12:50 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 19897 TO ITERATE

10.1% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

50 ANSWERS

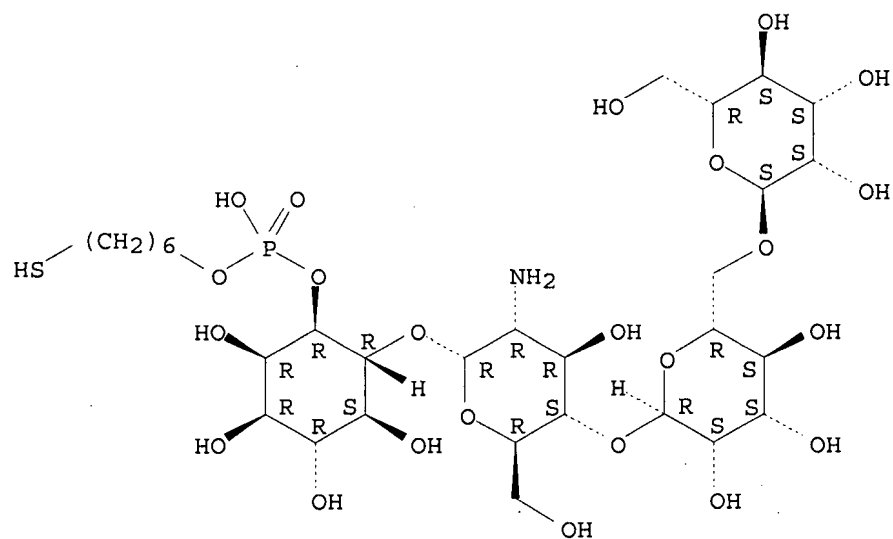
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 389495 TO 406385
PROJECTED ANSWERS: 36157 TO 41441

L4 50 SEA SSS SAM L3

=> d l4 scan

L4 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN D-myo-Inositol, O- α -D-mannopyranosyl-(1 \rightarrow 6)-O- α -D-
mannopyranosyl-(1 \rightarrow 4)-O-2-amino-2-deoxy- α -D-glucopyranosyl-
(1 \rightarrow 6)-, 1-(6-mercaptohexyl hydrogen phosphate) (9CI)
MF C30 H56 N O23 P S

Absolute stereochemistry.

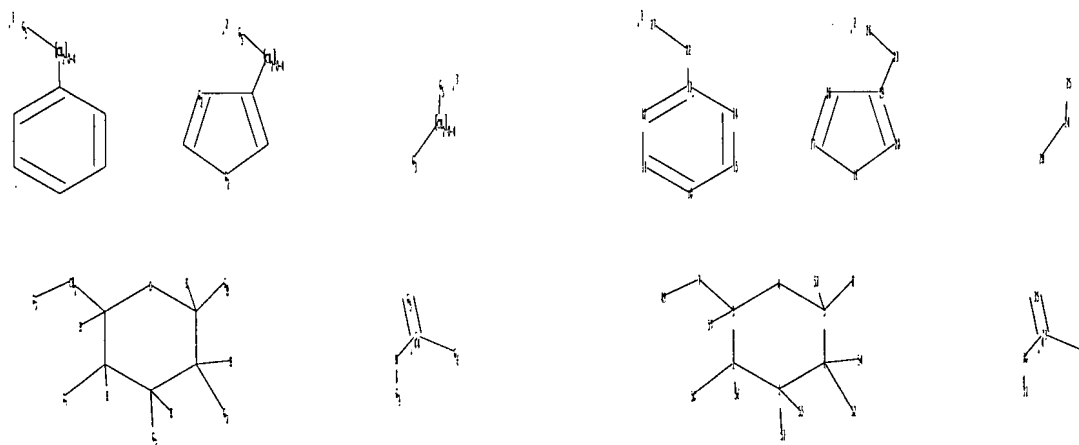


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>

Uploading C:\Program Files\Stnexp\Queries\10524048verifylimited.str



chain nodes :

7 8 22 23 24 25 26 27 28 30 31 33 35 37 49 50 51 52 53 54 55
56 57

ring nodes :

1 2 3 4 5 6 10 11 12 13 14 15 16 17 18 19 20

chain bonds :

1-51 1-55 2-50 2-56 3-7 3-57 5-8 5-53 6-52 6-54 7-49 13-22 19-23 22-27
23-26 24-25 24-28 30-31 30-33 33-35 33-37

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 10-11 10-15 11-12 12-13 13-14 14-15 16-17 16-20
17-18 18-19 19-20

exact/norm bonds :

1-2 1-6 1-51 1-55 2-3 2-50 2-56 3-4 3-7 3-57 4-5 5-6 5-8 5-53 6-52
6-54 7-49 13-22 16-17 16-20 17-18 18-19 19-20 19-23 22-27 23-26 24-25
24-28 30-31 30-33
33-35 33-37

normalized bonds :

10-11 10-15 11-12 12-13 13-14 14-15

G1:C,H

G2:C,N

G3:O,N

G4:C,S,P

G5:O,S

G6:C,O,N

G7:OH,MeO,EtO, [*1], [*2], [*3], [*4]

G8:CH3,Et,i-Pr, [*1], [*2], [*3]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 10:Atom 11:Atom
12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom
22:CLASS 23:CLASS
24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 33:CLASS
35:CLASS 37:CLASS
49:CLASS 50:CLASS 51:CLASS 52:CLASS 53:CLASS 54:CLASS 55:CLASS 56:CLASS
57:CLASS

L5 STRUCTURE UPLOADED

=> s 15

SAMPLE SEARCH INITIATED 12:13:46 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 130273 TO ITERATE

1.5% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

7 ANSWERS

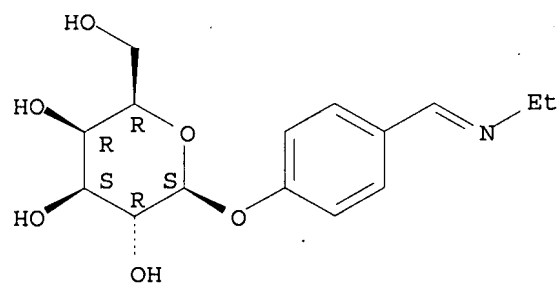
FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 2584109 TO 2626811
PROJECTED ANSWERS: 7838 TO 10400

L6 7 SEA SSS SAM L5

=> d 16 scan

L6 7 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN β -D-Galactopyranoside, 4-[(ethylimino)methyl]phenyl
MF C15 H21 N O6

Absolute stereochemistry.
Double bond geometry unknown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

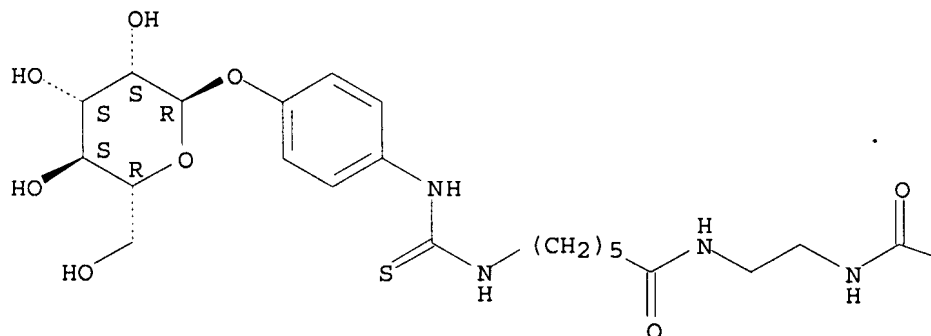
L6 7 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN Thiourea, N,N''-[1,2-ethanediylbis[imino(6-oxo-6,1-hexanediyl)]]bis[N''-[4-(α -D-mannopyranosyloxy)phenyl]- (9CI)

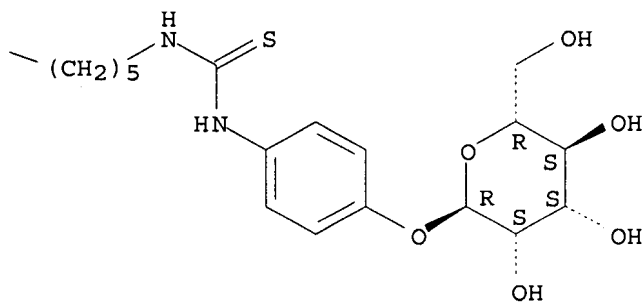
MF C40 H60 N6 O14 S2

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

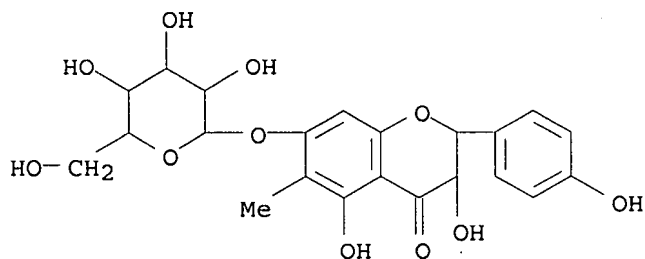


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L6 7 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN 4H-1-Benzopyran-4-one, 7-(β -D-glucopyranosyloxy)-2,3-dihydro-3,5-dihydroxy-2-(4-hydroxyphenyl)-6-methyl-, (2R-trans)- (9CI)

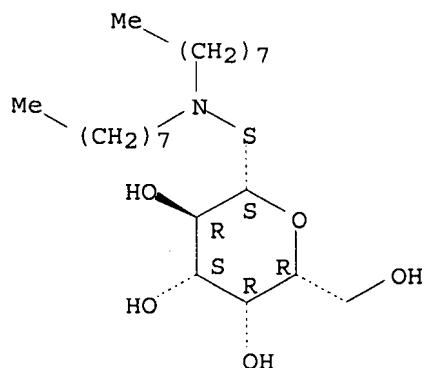
MF C22 H24 O11



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L6 7 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN β -D-Galactopyranose, 1-S-(dioctylamino)-1-thio- (9CI)
 MF C22 H45 N O5 S

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s l5 sss full

FULL SEARCH INITIATED 12:14:25 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 2605474 TO ITERATE

38.4% PROCESSED 1000000 ITERATIONS
 INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
 SEARCH TIME: 00.00.06

5095 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **INCOMPLETE**

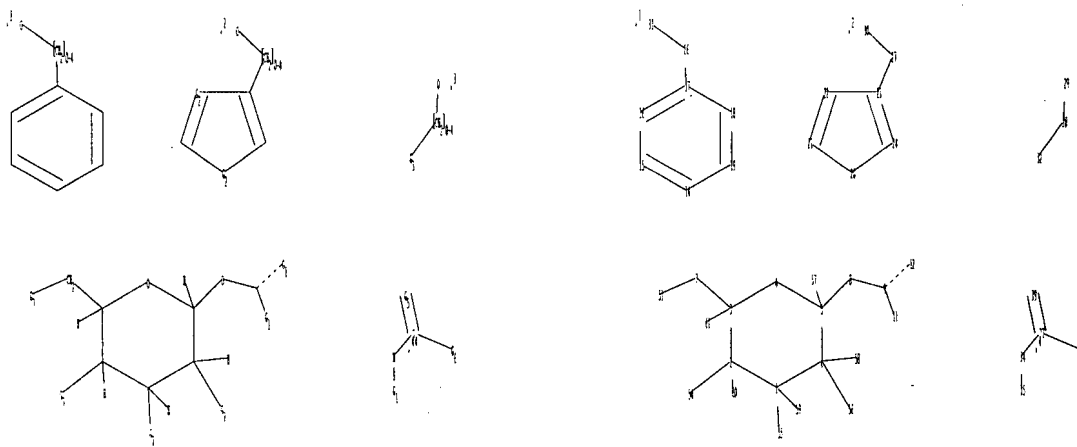
PROJECTED ITERATIONS: 2605474 TO 2605474

PROJECTED ANSWERS: 12929 TO 13619

L7 5095 SEA SSS FUL L5

=>

Uploading C:\Program Files\Stnexp\Queries\10524048verifynohydrox.str



chain nodes :

7 8 9 11 12 26 27 28 29 30 31 32 34 35 37 39 41 53 54 55 56
57 58 59 60 61

ring nodes :

1 2 3 4 5 6 14 15 16 17 18 19 20 21 22 23 24

chain bonds :

1-55 1-59 2-54 2-60 3-7 3-61 5-8 5-57 6-56 6-58 7-53 8-9 9-11 9-12
17-26 23-27 26-31 27-30 28-29 28-32 34-35 34-37 37-39 37-41

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19 20-21 20-24
21-22 22-23 23-24

exact/norm bonds :

1-2 1-6 1-55 1-59 2-3 2-54 2-60 3-4 3-7 3-61 4-5 5-6 5-8 5-57 6-56
6-58 7-53 8-9 9-11 9-12 17-26 20-21 20-24 21-22 22-23 23-24 23-27 26-31
27-30 28-29
28-32 34-35 34-37 37-39 37-41

normalized bonds :

14-15 14-19 15-16 16-17 17-18 18-19

G1:C,H

G2:C,N

G3:O,N

G4:C,S,P

G5:O,S

G6:C,O,N

G7:MeO,EtO,i-PrO,[*1],[*2],[*3],[*4]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 11:CLASS
12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom
22:Atom 23:Atom
24:Atom 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS
34:CLASS 35:CLASS
37:CLASS 39:CLASS 41:CLASS 53:CLASS 54:CLASS 55:CLASS 56:CLASS 57:CLASS
58:CLASS 59:CLASS
60:CLASS 61:CLASS

L8 STRUCTURE UPLOADED

=> s 18

SAMPLE SEARCH INITIATED 12:15:05 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 19897 TO ITERATE

10.1% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

26 ANSWERS

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 389495 TO 406385
PROJECTED ANSWERS: 4209 TO 6137

L9 26 SEA SSS SAM L8

=> s 18 sub=17

ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full

FULL SUBSET SEARCH INITIATED 12:15:18 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 4682 TO ITERATE

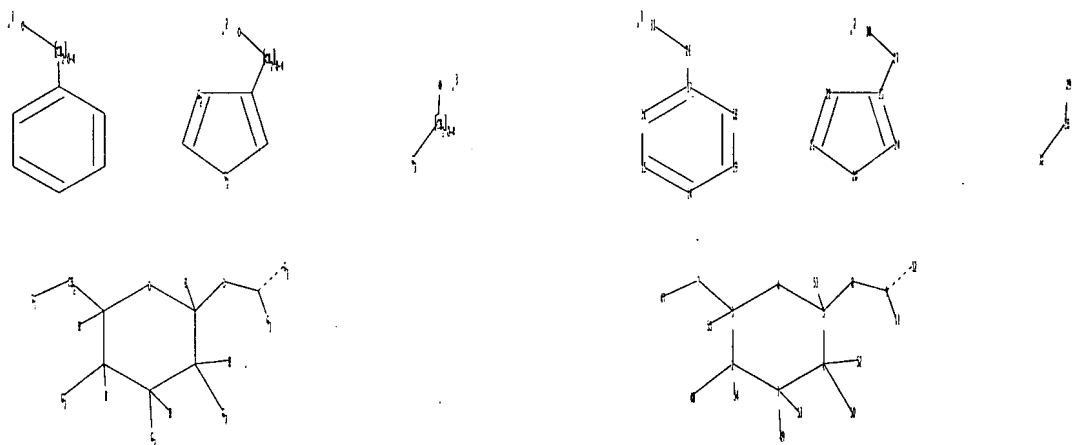
100.0% PROCESSED 4682 ITERATIONS
SEARCH TIME: 00.00.01

92 ANSWERS

L10 92 SEA SUB=L7 SSS FUL L8

=>

Uploading C:\Program Files\Stnexp\Queries\10524048verifynitrogen.str



chain nodes :

7 8 9 11 12 26 27 28 29 30 31 32 47 48 49 50 51 52 53 54 55

ring nodes :

1 2 3 4 5 6 14 15 16 17 18 19 20 21 22 23 24

chain bonds :

1-49 1-53 2-48 2-54 3-7 3-55 5-8 5-51 6-50 6-52 7-47 8-9 9-11 9-12
17-26 23-27 26-31 27-30 28-29 28-32

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 14-15 14-19 15-16 16-17 17-18 18-19 20-21 20-24
21-22 22-23 23-24

exact/norm bonds :

1-2 1-6 1-49 1-53 2-3 2-48 2-54 3-4 3-7 3-55 4-5 5-6 5-8 5-51 6-50
6-52 7-47 8-9 9-11 9-12 17-26 20-21 20-24 21-22 22-23 23-24 23-27 26-31
27-30 28-29

28-32

normalized bonds :

14-15 14-19 15-16 16-17 17-18 18-19

G1:C,H

G2:C,N

G3:O,N

G4:C,S,P

G5:O,S

G6:C,O,N

G7:OH,MeO,EtO,i-PrO,[*1],[*2],[*3]

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 11:CLASS

12:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom

22:Atom 23:Atom

24:Atom 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS

47:CLASS 48:CLASS

49:CLASS 50:CLASS 51:CLASS 52:CLASS 53:CLASS 54:CLASS 55:CLASS

L11 STRUCTURE UPLOADED

=> s l11 sub=l7

ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full

FULL SUBSET SEARCH INITIATED 12:15:59 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 4682 TO ITERATE

100.0% PROCESSED 4682 ITERATIONS

733 ANSWERS

SEARCH TIME: 00.00.01

L12 733 SEA SUB=L7 SSS FUL L11

=> s l7 not l12

L13 4362 L7 NOT L12

=> s l7 not l10

L14 5003 L7 NOT L10

=> s l13 not l10

L15 4356 L13 NOT L10

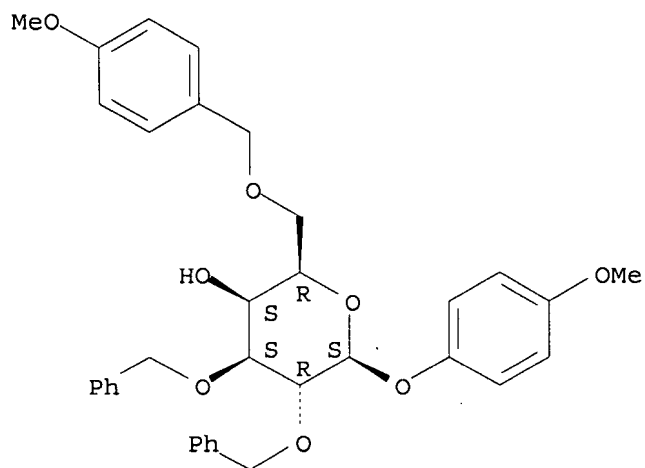
=> d l15 scan

L15 4356 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN β -D-Galactopyranoside, 4-methoxyphenyl 6-O-[(4-methoxyphenyl)methyl]-
2,3-bis-O-(phenylmethyl)-

MF C35 H38 O8

Absolute stereochemistry. Rotation (-).



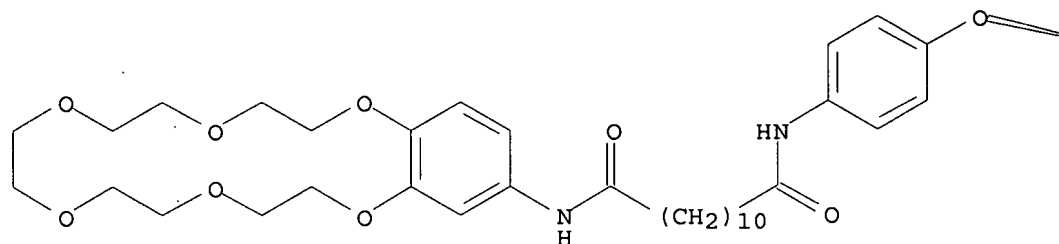
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

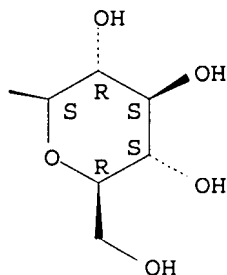
L15 4356 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN Dodecanediamide, N1-(2,3,5,6,8,9,11,12,14,15-decahydro-1,4,7,10,13,16-benzohexaoxacyclooctadecin-18-yl)-N12-[4-(β-D-glucopyranosyloxy)phenyl]-
 MF C40 H60 N2 O14
 CI COM

Absolute stereochemistry.

PAGE 1-A



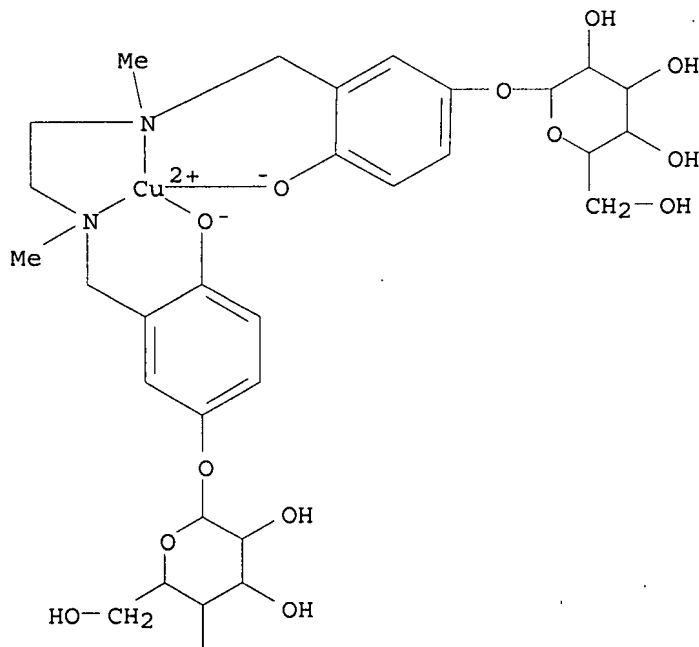
PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L15 4356 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Copper, [[1,2-ethanediylbis[(methylimino-κN)methylene[4-(hydroxy-κO)-3,1-phenylene]] bis[β-D-glucopyranosidato]](2-)]-,
(SP-4-2)-
MF C30 H42 Cu N2 O14
CI CCS

PAGE 1-A



PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

257.45

257.66

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 12:16:58 ON 28 NOV 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623 .

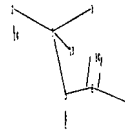
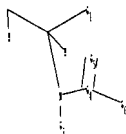
PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'REGISTRY' AT 12:22:08 ON 28 NOV 2007
FILE 'REGISTRY' ENTERED AT 12:22:08 ON 28 NOV 2007
COPYRIGHT (C) 2007 American Chemical Society (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	257.45	257.66

=>

Uploading C:\Program Files\Stnexp\Queries\10424048nitrogen.str



chain nodes :
1 2 3 5 6 8 10 12 13 14
chain bonds :
1-2 1-3 1-13 1-5 2-14 5-6 5-8 8-10 8-12
exact/norm bonds :
1-3 1-5 5-6 5-8 8-10 8-12
exact bonds :
1-2 1-13 2-14

G1:C,H

G4:C,S,P

G5:O,S

G6:C,O,N

Match level :

1:Atom 2:Atom 3:CLASS 5:CLASS 6:CLASS 8:CLASS 10:CLASS 12:CLASS 13:CLASS
14:CLASS

L16 STRUCTURE UPLOADED

=> d his

(FILE 'HOME' ENTERED AT 12:03:56 ON 28 NOV 2007)

FILE 'REGISTRY' ENTERED AT 12:04:25 ON 28 NOV 2007

L1 STRUCTURE UPLOADED
L2 50 S L1
L3 STRUCTURE UPLOADED
L4 50 S L3
L5 STRUCTURE UPLOADED
L6 7 S L5
L7 5095 S L5 SSS FULL
L8 STRUCTURE UPLOADED
L9 26 S L8
L10 92 S L8 SUB=L7 FULL
L11 STRUCTURE UPLOADED
L12 733 S L11 SUB=L7 FULL
L13 4362 S L7 NOT L12
L14 5003 S L7 NOT L10
L15 4356 S L13 NOT L10
L16 STRUCTURE UPLOADED

=> s l16 sub=l15

ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full

FULL SUBSET SEARCH INITIATED 12:22:43 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 1571 TO ITERATE

100.0% PROCESSED 1571 ITERATIONS
SEARCH TIME: 00.00.02

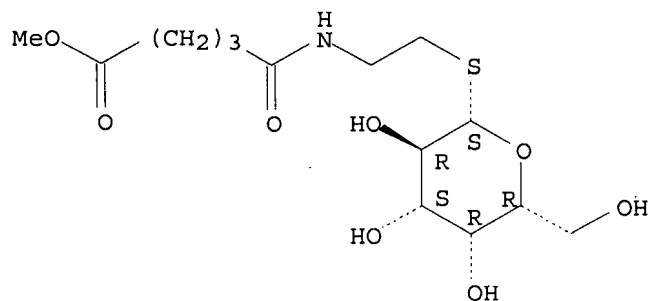
266 ANSWERS

L17 266 SEA SUB=L15 SSS FUL L16

=> d l17 scan

L17 266 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Pentanoic acid, 5-[[2-(β -D-galactopyranosylthio)ethyl]amino]-5-oxo-,
methyl ester (9CI)
MF C14 H25 N O8 S

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L17 266 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN Cyclo[L-alanyl-N6-[[[(β-D-glucopyranosyloxy)imino]acetyl]-L-lysyl-L-prolylglycyl-N6-[[[(β-D-glucopyranosyloxy)imino]acetyl]-L-lysyl-N6-[5-[(3aS,4S,6aR)-hexahydro-5,5-dioxido-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-L-lysyl-N6-[[[(β-D-glucopyranosyloxy)imino]acetyl]-L-lysyl-L-prolylglycyl-N6-[[[(β-D-glucopyranosyloxy)imino]acetyl]-L-lysyl](9CI)

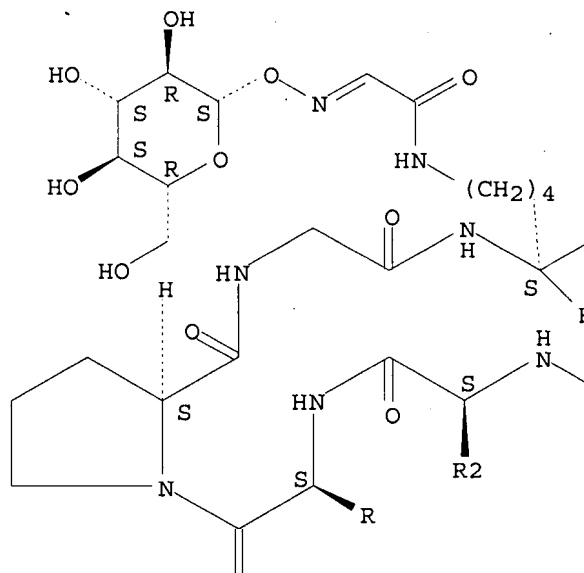
SQL 10

MF C89 H143 N21 O42 S

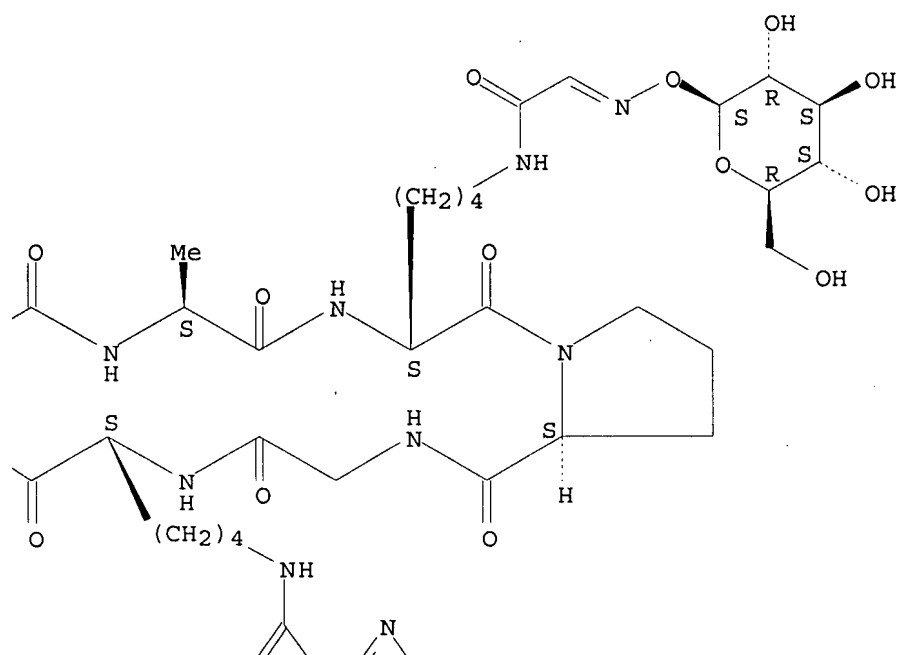
RELATED SEQUENCES AVAILABLE WITH SEQLINK

Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A



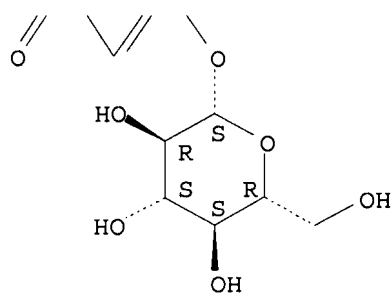
PAGE 1-B

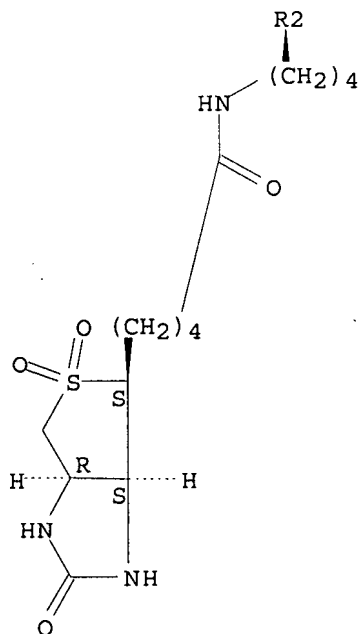
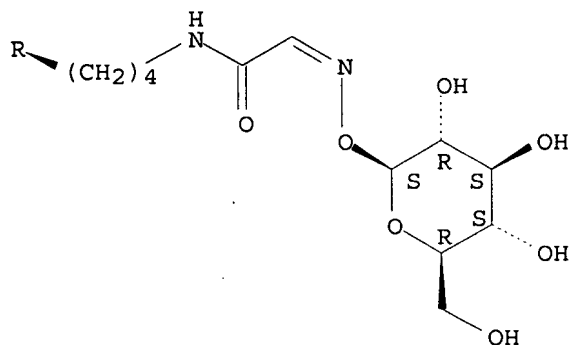


PAGE 2-A



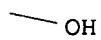
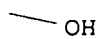
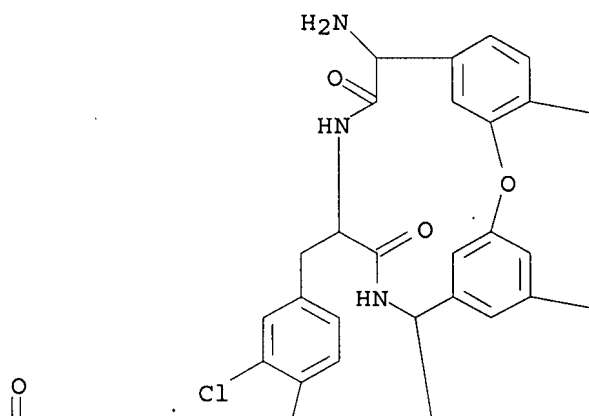
PAGE 2-B

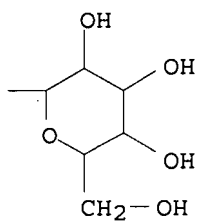
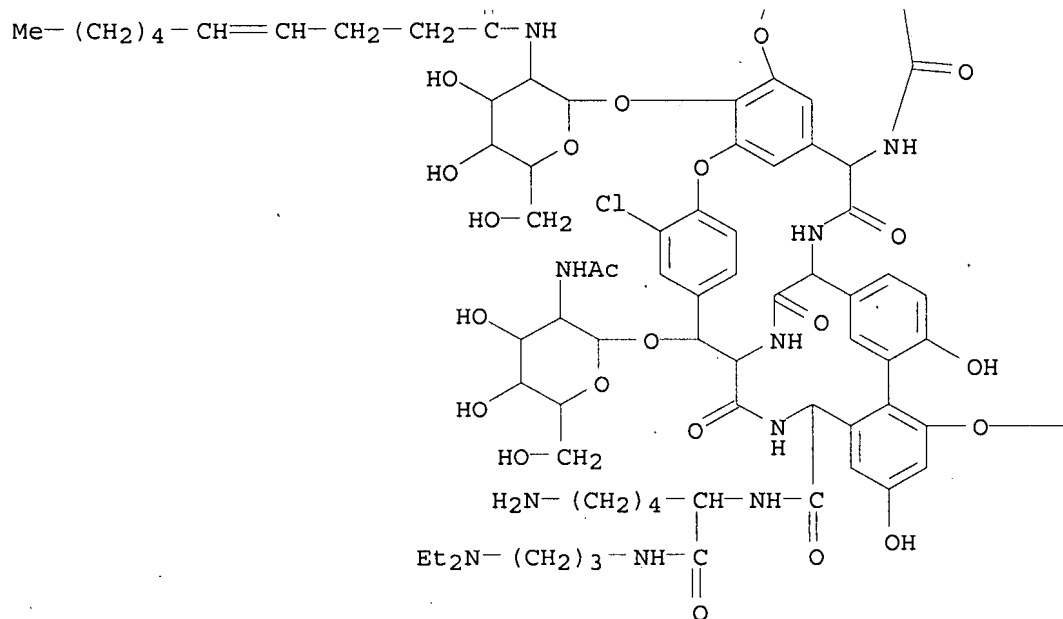




PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 266 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN Ristomycin A aglycone, 34-O-[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]-38-[[[5-amino-1-[[[3-(diethylamino)propyl]amino]carbonyl]pentyl]amino]carbonyl]-22,31-dichloro-38-de(methoxycarbonyl)-7-demethyl-19-deoxy-56-O-[2-deoxy-2-[(1-oxo-4-decenyl)amino]-β-D-glucopyranosyl]-42-O-α-D-mannopyranosyl- (9CI)
 MF C101 H123 Cl2 N13 O33
 CI COM

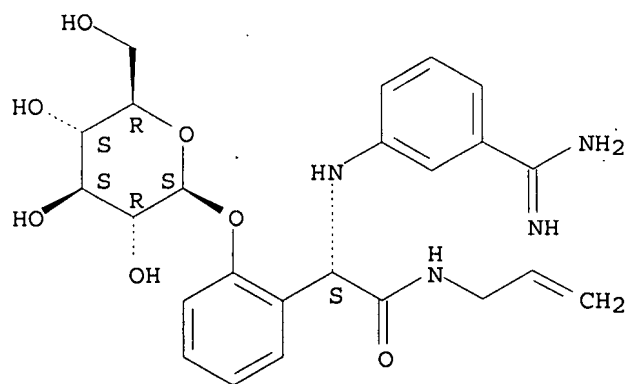




PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L17 266 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN Benzeneacetamide, α-[[3-(aminoiminomethyl)phenyl]amino]-2-(β-D-glucopyranosyloxy)-N-2-propenyl-, (αS)-(9CI)
 MF C24 H30 N4 O7

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> log hold

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
299.00	299.21

FULL ESTIMATED COST

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 12:23:14 ON 28 NOV 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

***** RECONNECTED TO STN INTERNATIONAL *****
 SESSION RESUMED IN FILE 'REGISTRY' AT 12:25:14 ON 28 NOV 2007
 FILE 'REGISTRY' ENTERED AT 12:25:14 ON 28 NOV 2007
 COPYRIGHT (C) 2007 American Chemical Society (ACS)

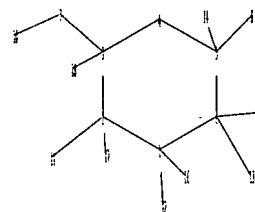
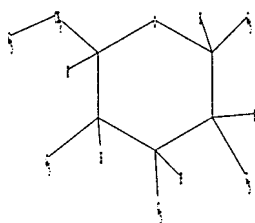
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
299.00	299.21

FULL ESTIMATED COST

=>

Uploading C:\Program Files\Stnexp\Queries\10524048nonitrogen2.str



```

chain nodes :
7  8  10  11  12  13  14  15  16  17  18
ring nodes :
1  2  3  4  5  6
chain bonds :
1-12  1-16  2-11  2-17  3-7  3-18  5-8  5-14  6-13  6-15  7-10
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
1-2  1-6  1-12  2-3  2-11  3-4  4-5  5-6  5-8  6-13  7-10
exact bonds :
1-16  2-17  3-7  3-18  5-14  6-15

```

G5:O,S

```

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  10:CLASS  11:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS

```

L18 STRUCTURE UPLOADED

=> d his

(FILE 'HOME' ENTERED AT 12:03:56 ON 28 NOV 2007)

FILE 'REGISTRY' ENTERED AT 12:04:25 ON 28 NOV 2007

L1 STRUCTURE UPLOADED

L2 50 S L1
 L3 STRUCTURE UPLOADED
 L4 50 S L3
 L5 STRUCTURE UPLOADED
 L6 7 S L5
 L7 5095 S L5 SSS FULL
 L8 STRUCTURE UPLOADED
 L9 26 S L8
 L10 92 S L8 SUB=L7 FULL
 L11 STRUCTURE UPLOADED
 L12 733 S L11 SUB=L7 FULL
 L13 4362 S L7 NOT L12
 L14 5003 S L7 NOT L10
 L15 4356 S L13 NOT L10
 L16 STRUCTURE UPLOADED
 L17 266 S L16 SUB=L15 FULL
 L18 STRUCTURE UPLOADED

=> s l18 sub=l15

ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full

FULL SUBSET SEARCH INITIATED 12:25:47 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 3669 TO ITERATE

100.0% PROCESSED 3669 ITERATIONS
 SEARCH TIME: 00.00.01

3591 ANSWERS

L19 3591 SEA SUB=L15 SSS FUL L18

=> s l15 not l19

L20 765 L15 NOT L19

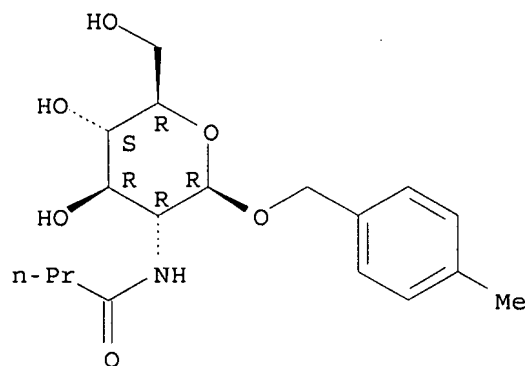
=> d l20 scan

L20 765 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN β -D-Glucopyranoside, (4-methylphenyl)methyl 2-deoxy-2-[(1-oxobutyl)amino]-

MF C18 H27 N O6

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

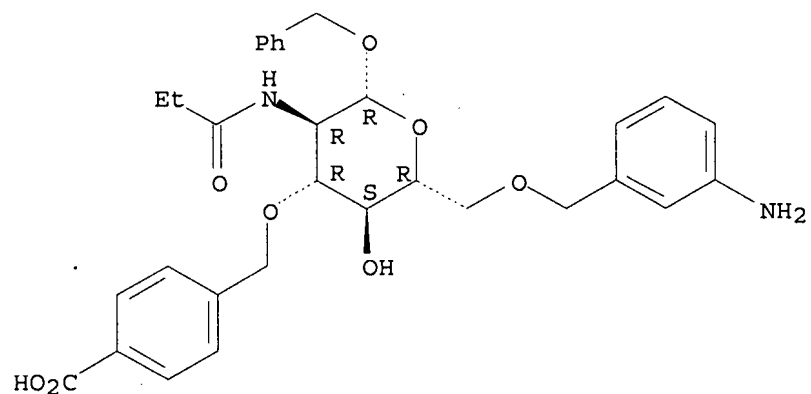
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L20 765 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN β -D-Glucopyranoside, phenylmethyl 6-O-[(3-aminophenyl)methyl]-3-O-[(4-

carboxyphenyl)methyl]-2-deoxy-2-[(1-oxopropyl)amino]-
MF C31 H36 N2 O8

Absolute stereochemistry.

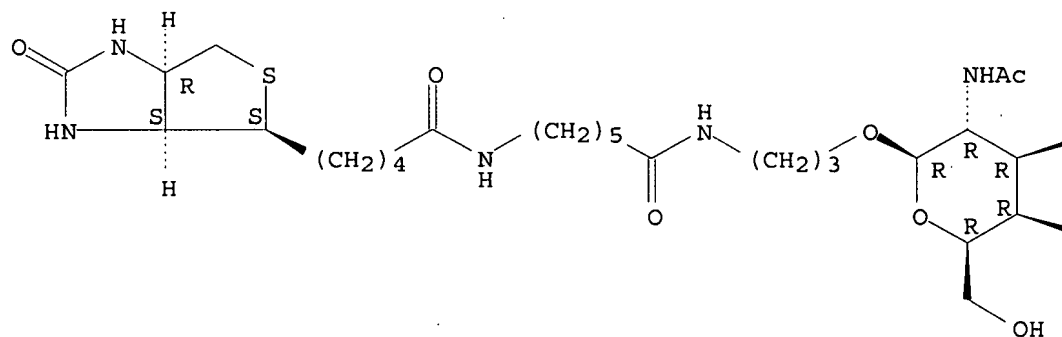


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L20 765 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[6-[[3-[[2-(acetylamino)-2-deoxy-β-D-galactopyranosyl]oxy]propyl]amino]-6-oxohexyl]hexahydro-2-oxo-, (3aS,4S,6aR)-
MF C27 H47 N5 O9 S

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

OH

OH

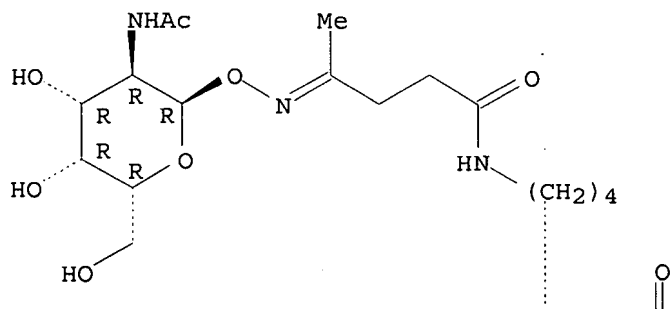
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

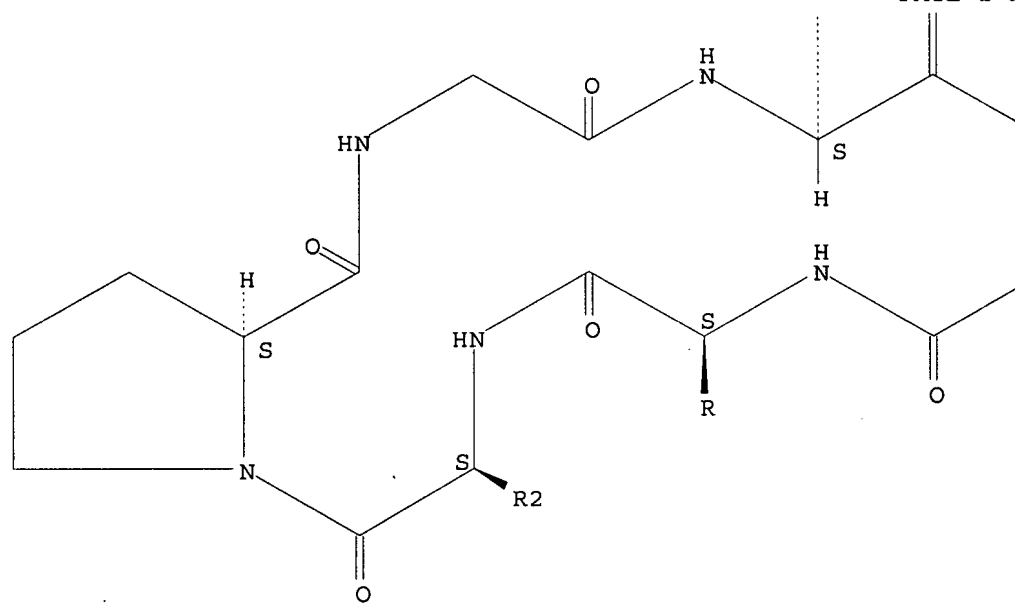
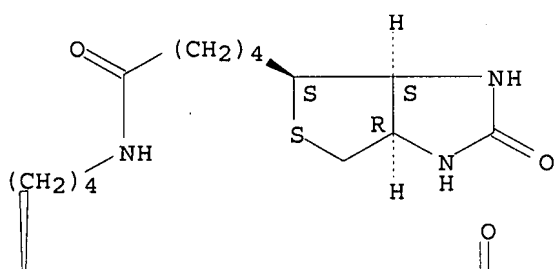
L20 765 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Cyclo[glycyl-N6-[4-[[[2-(acetylamino)-2-deoxy- α -D-galactopyranosyl]oxy]imino]-1-oxopentyl]-L-lysyl-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-L-lysyl-N6-[4-[[[2-(acetylamino)-2-deoxy- α -D-galactopyranosyl]oxy]imino]-1-oxopentyl]-L-lysyl-L-prolylglycyl-N6-[4-[[[2-(acetylamino)-2-deoxy- α -D-galactopyranosyl]oxy]imino]-1-oxopentyl]-L-lysyl-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-L-lysyl-N6-[4-[[[2-(acetylamino)-2-deoxy- α -D-galactopyranosyl]oxy]imino]-1-oxopentyl]-L-lysyl-L-prolyl] (9CI)
SQL 10
MF C122 H200 N28 O42 S2

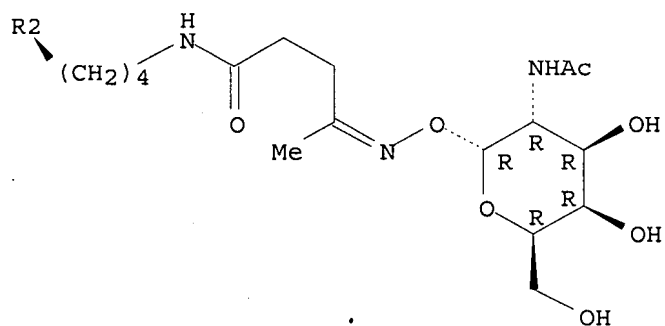
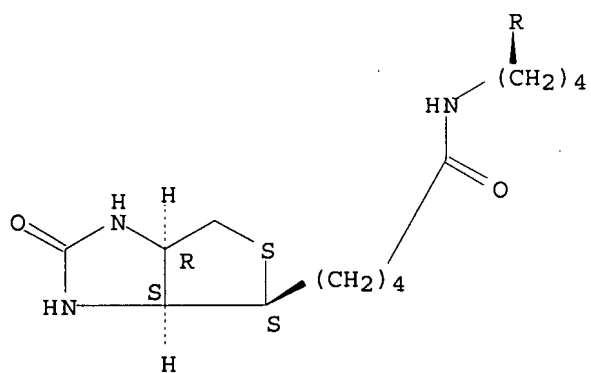
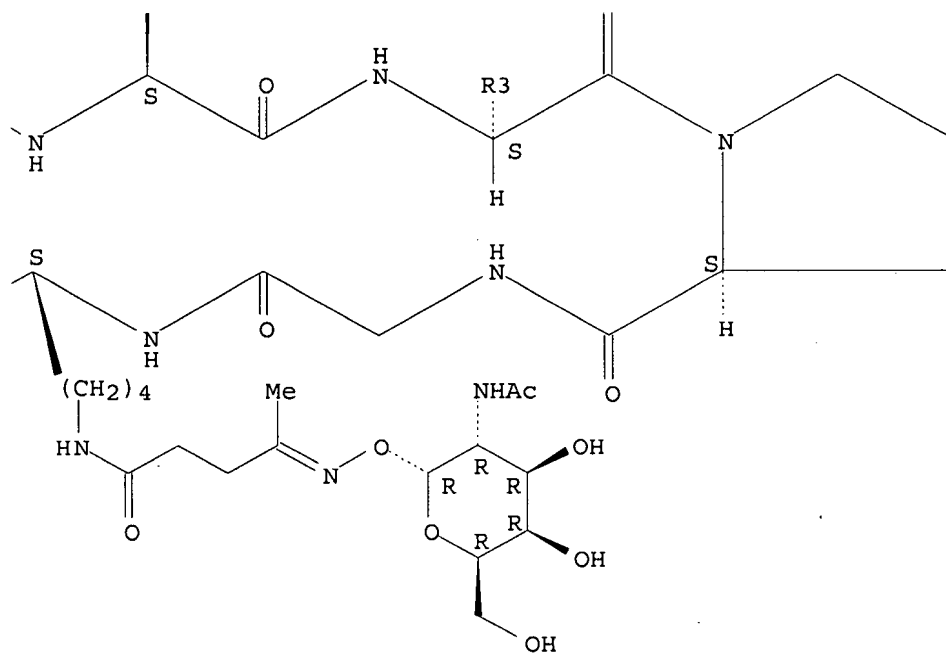
RELATED SEQUENCES AVAILABLE WITH SEQLINK

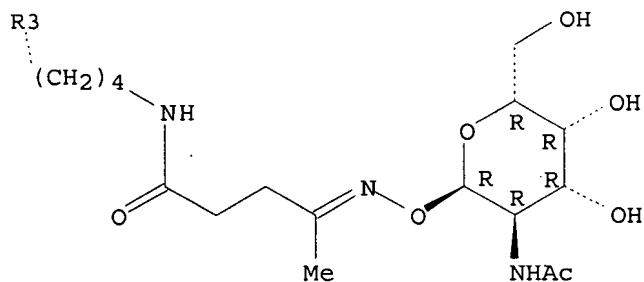
Absolute stereochemistry.
Double bond geometry unknown.

PAGE 1-A









PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

341.00

341.21

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 12:26:44 ON 28 NOV 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *

SESSION RESUMED IN FILE 'REGISTRY' AT 12:28:48 ON 28 NOV 2007

FILE 'REGISTRY' ENTERED AT 12:28:48 ON 28 NOV 2007

COPYRIGHT (C) 2007 American Chemical Society (ACS)

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

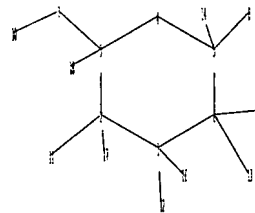
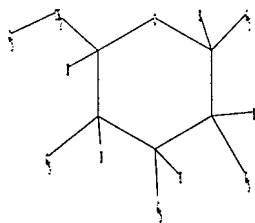
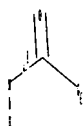
FULL ESTIMATED COST

341.00

341.21

=>

Uploading C:\Program Files\Stnexp\Queries\10524048nonitrogen3.str



chain nodes :
 7 8 10 11 12 13 14 15 16 17 18 20 21 22 23 25
 ring nodes :
 1 2 3 4 5 6
 chain bonds :
 1-12 1-16 2-11 2-17 3-7 3-18 5-8 5-14 6-13 6-15 7-10 20-21 20-22 22-23
 22-25
 ring bonds :
 1-2 1-6 2-3 3-4 4-5 5-6
 exact/norm bonds :
 1-2 1-6 1-12 2-3 2-11 3-4 4-5 5-6 5-8 6-13 7-10 20-22 22-23 22-25
 exact bonds :
 1-16 2-17 3-7 3-18 5-14 6-15 20-21

G5:O,S, [*1]

G6:CH3,CF3,O

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 10:CLASS 11:CLASS
 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 20:CLASS
 21:CLASS 22:CLASS
 23:CLASS 25:CLASS

L21 STRUCTURE UPLOADED

=> d his

(FILE 'HOME' ENTERED AT 12:03:56 ON 28 NOV 2007)

FILE 'REGISTRY' ENTERED AT 12:04:25 ON 28 NOV 2007

L1 STRUCTURE UPLOADED
L2 50 S L1
L3 STRUCTURE UPLOADED
L4 50 S L3
L5 STRUCTURE UPLOADED
L6 7 S L5
L7 5095 S L5 SSS FULL
L8 STRUCTURE UPLOADED
L9 26 S L8
L10 92 S L8 SUB=L7 FULL
L11 STRUCTURE UPLOADED
L12 733 S L11 SUB=L7 FULL
L13 4362 S L7 NOT L12
L14 5003 S L7 NOT L10
L15 4356 S L13 NOT L10
L16 STRUCTURE UPLOADED
L17 266 S L16 SUB=L15 FULL
L18 STRUCTURE UPLOADED
L19 3591 S L18 SUB=L15 FULL
L20 765 S L15 NOT L19
L21 STRUCTURE UPLOADED

=> s l21 sub=l15 full

FULL SUBSET SEARCH INITIATED 12:29:29 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 4341 TO ITERATE

100.0% PROCESSED 4341 ITERATIONS
SEARCH TIME: 00.00.01

3864 ANSWERS

L22 3864 SEA SUB=L15 SSS FUL L21

=> s l15 not l22

L23 492 L15 NOT L22

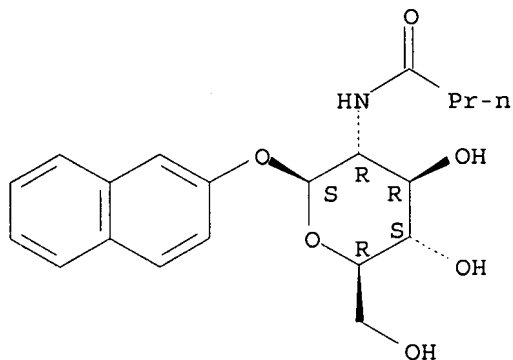
=> d l23 scan

L23 492 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN β -D-Glucopyranoside, 2-naphthalenyl 2-deoxy-2-[(1-oxobutyl)amino]-

MF C20 H25 N O6

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L23 492 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Glycinamide, D-leucyl-3-nitro-D-tyrosyl-L-phenylalanyl-(2R,3R)-3-[3-[[2-deoxy-2-[(1-oxododecyl)amino]-β-D-glucopyranosyl]oxy]-5-hydroxy-4-methoxyphenyl]-2-hydroxy-β-alanyl-4-aminobutanoyl-N-[2-(dimethylamino)ethyl]-2-phenyl-, cyclic (2→45)-ether, stereoisomer, mono(trifluoroacetate) (salt) (9CI)

SQL 6

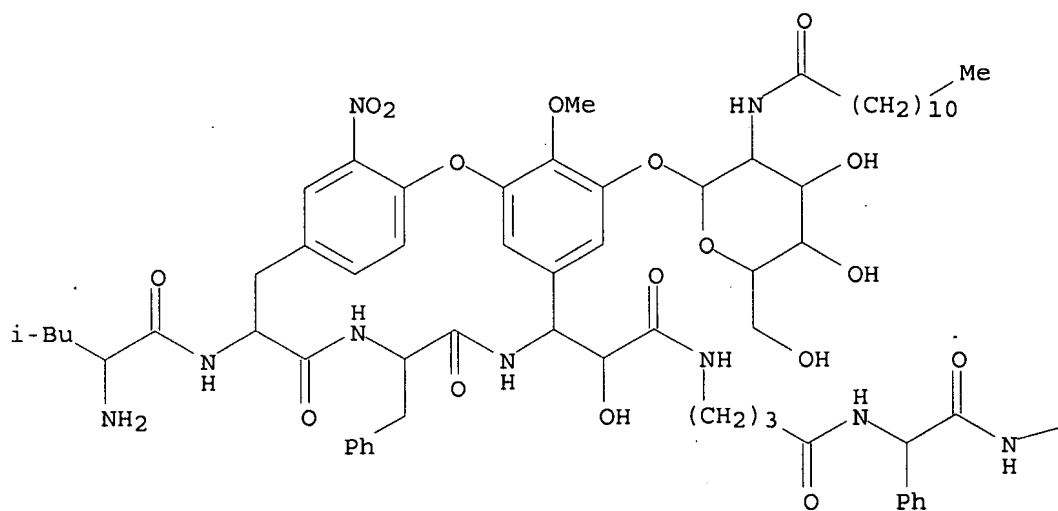
MF C69 H98 N10 O17 . C2 H F3 O2

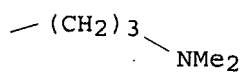
RELATED SEQUENCES AVAILABLE WITH SEQLINK

CM 1

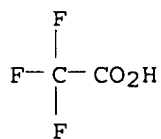
RELATED SEQUENCES AVAILABLE WITH SEQLINK

PAGE 1-A





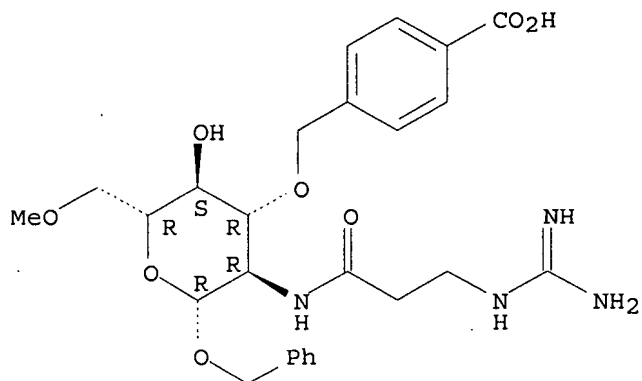
CM 2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L23 492 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN β -D-Glucopyranoside, phenylmethyl 2-[[3-[(aminoiminomethyl)amino]-1-oxopropyl]amino]-3-O-[(4-carboxyphenyl)methyl]-2-deoxy-6-O-methyl-
 MF C26 H34 N4 O8

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

382.55

382.76

FILE 'CAPLUS' ENTERED AT 12:29:58 ON 28 NOV 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 28 Nov 2007 VOL 147 ISS 23

FILE LAST UPDATED: 27 Nov 2007 (20071127/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l23

L24 42 L23

=> s l24 and (PY<2003 or AY<2003 or PRY<2003)

22908413 PY<2003

4467638 AY<2003

3946524 PRY<2003

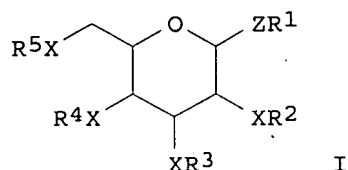
L25 5 L24 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d l25 1-5 ti abs bib

L25 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

TI Tetrahydropyran compounds that interact with G protein-coupled receptors (GPCRs)

GI



AB The invention discloses a method of inhibiting or effecting the activity

of a GPCR which comprises contacting a GPCR with a compound I [Z = S, O, NRA (RA = R1-R5, C1-15 acyl, etc.); X = O, NRA; R1-R5 = H, C1-12 alkyl, C4-15 aryl, etc.; with provisos; ring may be of any configuration], or a pharmaceutically acceptable salt thereof. Libraries of compds. of the invention were tested for activity in assays using melanocortin and somatostatin receptors.

AN 2004:333585 CAPLUS <<LOGINID::20071128>>

DN 140:350624

TI Tetrahydropyran compounds that interact with G protein-coupled receptors (GPCRs)

IN Meutermans, Wim; Thanh, Giang Le; Abbenante, Giovanni; Tometzki, Gerald; Halliday, Judy; Zeugg, Johannes

PA Alchemia Pty. Ltd., Australia

SO PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

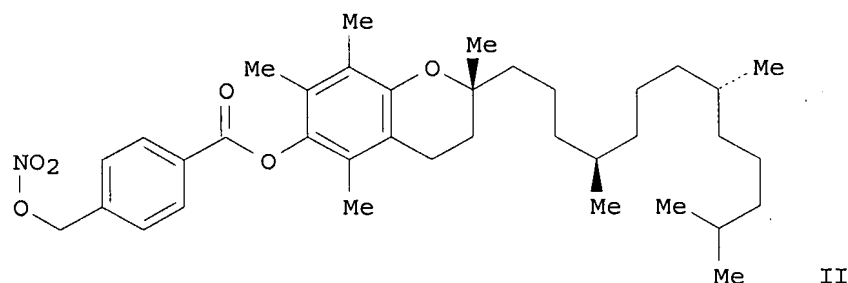
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2004032940	A1	20040422	WO 2003-AU1347	20031010 <--	
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	CA 2499677	A1	20040422	CA 2003-2499677	20031010 <--	
	AU 2003266858	A1	20040504	AU 2003-266858	20031010 <--	
	EP 1549325	A1	20050706	EP 2003-747740	20031010 <--	
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK		
	CN 1703228	A	20051130	CN 2003-80101113	20031010 <--	
	JP 2006504718	T	20060209	JP 2004-542106	20031010 <--	
	US 2006223764	A1	20061005	US 2003-530851	20031010 <--	
	IN 2005KN00858	A	20060609	IN 2005-KN858	20050511 <--	
PRAI	AU 2002-951995	A	20021011 <--			
	WO 2003-AU1347	W	20031010			
OS	MARPAT 140:350624					

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of nitrate prodrugs able to release nitric oxide in a controlled and selective way and their use for prevention and treatment of inflammatory, ischemic and proliferative diseases

GI



AB New pharmaceutical compds. of general formula F-(X)q (I) [q = 1-5, preferably 1; F is chosen among drugs such as δ -tocopherol, clidanac, diethylhomospermine, glucosamine, thymocartin, vofopitant, etc.; X is chosen among 4 groups M, T, V, and Y where M = ONO₂, nitrate salt, nitrite ester, ONO, thioinitrite, SNO, etc., T = OR₁-M, OR₁OR₁-M, SR₁NR₂R₁-M, NR₂R₁-M, NR₂R₁SR₁-M, etc., R₁ = saturated or unsatd., linear or branched alkylene, having 1 to 21 carbon atoms or a saturated or unsatd., optionally heterosubstituted or branched cycloalkylene, having 3 to 7 carbon atoms or an optionally heterosubstituted arylene having 3 to 7 carbon atoms; R₂ = H, saturated or unsatd., linear or branched 1-21 carbon atom alkyl, saturated or unsatd. optionally heterosubstituted or branched 3-7 carbon cycloalkyl, optionally heterosubstituted 3-7 carbon aryl; R₁, R₂ = OH, SH, F, Cl, Br, OPO₃H₂, CO₂H, etc.; bond between F and T = carboxylic ester, carboxylic amide, glycoside, azo, thioester, sulfonic ester, etc.; V = Z-M₂, OZ-M₂, NR₂Z-M₂, R₁Z-M₂, OR₁-M₂, OR₁Z-M₂, M₂ = M, R₁-M, OR₁-M, SR₁-M, NR₂R₁-M; ZM₂ = COCH₂CH(M₂)CH₂N+Me₃, COCH₂CH₂COM₂, COCH(NHR₂)CH₂M₂, etc.; Y = 4-COC₆H₄CH₂ONO₂, O(CH₂)₄ONO₂, COCH(NH₂)CH₂ONO₂, 3-OC₆H₄CH₂ONO₂, etc.] were prepared For example, α -tocopherol reacted with 4-HO₂CC₆H₄CH₂ONO₂ to give the nitroxymethyl derivative II. The compds. of general formula I are nitrate prodrugs which can release nitric oxide in vivo in a controlled and selective way and without hypotensive side effects and for this reason they are useful for the preparation of medicines for prevention and treatment of inflammatory, ischemic, degenerative and proliferative diseases of musculoskeletal, tegumental, respiratory, gastrointestinal, genito-urinary and central nervous systems.

AN 2003:652131 CAPLUS <<LOGINID::20071128>>

DN 139:214237

TI Preparation of nitrate prodrugs able to release nitric oxide in a controlled and selective way and their use for prevention and treatment of inflammatory, ischemic and proliferative diseases

IN Scaramuzzino, Giovanni

PA Italy

SO Eur. Pat. Appl., 313 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1336602	A1	20030820	EP 2002-425075	20020213 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

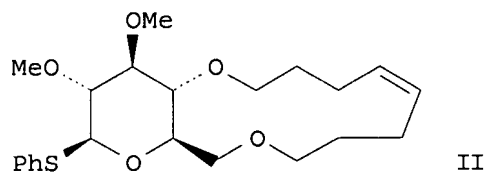
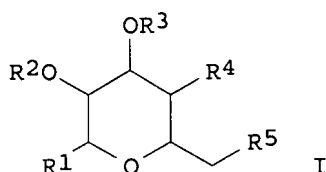
PRAI EP 2002-425075 20020213 <--

RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation and use of glycoside-based ring structures with antimicrobial and cytostatic activity

GI



AB Novel glycoside-based compds. I, wherein R1 is H, SPh, Ph, PhS, All, Bn; R2 is H, Et, All, Me, Bn; R3 is H, Et, Me, All, Bn; R4 and R5 form a ring and are -carbamate-C6-alkyl-ether-C4-alkenyl-ether-, -ester-C6-alkenyl-ester-, -ester-C6-alkyl-ester-, -ether-C8-alkenyl-ether-, -ester-C6-alkenyl-amide-, -ether-C7-alkenyl-amide-, -ester-C10-alkenyl-ester-, -ester-C18-alkenyl-ester-, -OCH(Ph)CH2O-, with an attached ring system that have antimicrobial or cytostatic activity. The compds. are administered to humans and animals for the treatment or amelioration of bacterial, fungal, viral, or protozoal infections or tumors. Thus, glycoside II was prepared and tested in humans for its antimicrobial and cytostatic activities.

AN 2003:319645 CAPLUS <<LOGINID::20071128>>

DN 138:321501

TI Preparation and use of glycoside-based ring structures with antimicrobial and cytostatic activity

IN Sas, Benedikt; Van Der Eycken, Johan; Van Hemel, Johan; Blom, Petra; Vandenkerckhove, Jan; Ruttens, Bart

PA Kemin Pharma Europe, USA

SO PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003032905	A2	20030424	WO 2002-US32817	20021015 <--
	WO 2003032905	A3	20040129		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2003158243	A1	20030821	US 2001-977478	20011015 <--
	US 7138531	B2	20061121		
	CA 2463084	A1	20030424	CA 2002-2463084	20021015 <--
	AU 2002335813	A1	20030428	AU 2002-335813	20021015 <--
	EP 1446391	A2	20040818	EP 2002-770578	20021015 <--
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
	JP 2005509615	T	20050414	JP 2003-535711	20021015 <--

US 2004224904 A1 20041111 US 2004-861768 20040604 <--
 PRAI US 2001-977478 A 20011015 <--
 WO 2002-US32817 W 20021015 <--
 OS MARPAT 138:321501

L25 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Intramolecular Hydrogen Abstraction Reaction Promoted by Alkoxy Radicals
 in Carbohydrates. Synthesis of Chiral 2,7-Dioxabicyclo[2.2.1]heptane and
 6,8-Dioxabicyclo[3.2.1]octane Ring Systems
 AB The reaction of specifically protected anhydroalditols with
 (diacetoxyiodo)benzene or iodosylbenzene and iodine is a mild and
 selective procedure for the synthesis of chiral 6,8-
 dioxabicyclo[3.2.1]octane and 2,7-dioxabicyclo[2.2.1]heptane ring systems
 under neutral conditions. This reaction can be considered to be an
 intramol. glycosidation that goes through an intramol. hydrogen
 abstraction promoted by an alkoxy radical followed by oxidation of the
 transient C-radical intermediate to an oxycarbenium ion. This methodol.
 is useful not only for the preparation of chiral synthons but also for the
 selective oxidation of specific carbons of the carbohydrate skeleton,
 constituting a good procedure for the synthesis of protected uloses.

AN 2002:782769 CAPLUS <<LOGINID::20071128>>

DN 137:385018

TI Intramolecular Hydrogen Abstraction Reaction Promoted by Alkoxy Radicals
 in Carbohydrates. Synthesis of Chiral 2,7-Dioxabicyclo[2.2.1]heptane and
 6,8-Dioxabicyclo[3.2.1]octane Ring Systems

AU Francisco, Cosme G.; Herrera, Antonio J.; Suarez, Ernesto

CS Instituto de Productos Naturales y Agrobiologia, C.S.I.C., La Laguna,
 Tenerife, 38206, Spain

SO Journal of Organic Chemistry (2002), 67(21), 7439-7445
 CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English

OS CASREACT 137:385018

RE.CNT 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 TI The methylation of N-acetylglucosamine derivatives
 AB With MeI and BaO in HCONMe2 permethylation in 1 operation is possible;
 good yields of the O-Me ether of β -Et and α -benzyl-N-acetyl-D-
 glucosaminide as well as of N-acetyllactosaminol are obtained. Thus, in a
 3-necked flask with stirrer was refluxed 5 g. β -ethyl-N-acetyl-D-
 glucosaminide in 50 cc. HCONMe2 (dried over BaO), 15 cc. MeI, and 18.4 g.
 finely powdered BaO, the spontaneous rise in temperature being controlled by
 stirring and cooling so that the temperature was kept at 40-5°. After
 another hr. the temperature fell to 23° and stirring was continued 5.5
 hrs. The resulting thin, yellow paste added to 500 cc. CHCl3, filtered by
 suction, and shaken 3 times with 100 cc. H2O became colorless; the
 washings extracted 3 times with 50-cc. portions of CHCl3, dried over Na2SO4,
 and evaporated in vacuo yielded 4.8 g. crystalline β -Et 3,4,6-trimethyl-N-
 acetyl-D-glucosaminide (I), m. 190-1° (EtOAc), $[\alpha]_{20D}$
 5.9° and 5.6° (different preps.) (c 2, CHCl3),
 -16.7° (c 2, MeOH), unchanged by recrystn. from C6H6. A similar
 experiment carried out without cooling resulted in a temperature rise in 1.5
 hrs. to
 87°, which dropped slowly, and after 3.5 hrs. was obtained 4.7 g.
 crude product yielding on recrystn. from EtOAc 3.3 g. product, m.
 191°. When HCONMe2 (containing 0.5% H2O) was used, the crude yield was
 5.6 g.; the temperature rose to 95° after 52 min., fell to 66°,
 and the mixture was shaken 3.5 hrs. The recrystd. product (3.2 g.) m.
 191-2°. I (500 mg.) refluxed 15 hrs. with 50 cc. N HCl, treated
 with bone black in vacuo at a low temperature, and washed many times with H2O
 before drying gave 280 mg. 3,4,6-tri-O-methyl- D-glucosamine-HCl (II),

becoming brown at 200° without melting (MeOH-Et2O), $[\alpha]_{20D}$ 51.9° (initial) → 99.6° (c 1, H2O).

N-Acetylglucosamine (6 g. synthetic product, mol. weight 415 with 1 MeOH) in 50 cc. H2O treated with 1.1 g. KBH4, kept at room temperature 2 hrs. until a slightly acidified test solution no longer reduced Fehling solution, the K ions removed by Amberlite IR-120(H+), the excess KBH4 decomposed (very little H evolution), and the mixture evaporated to dryness, first in vacuo, then treated many times with MeOH until no green color (test for B) was obtained yielded 5.4 g. N-acetylglucosaminol (III), C14H27NO11. III (1.50 g.) in 20 cc. dried HCONMe2 was treated with 13.3 g. MeI (3 times theory) and 7.2 g. finely powdered BaO and shaken under anhydrous conditions; the mixture

became

warm gradually at first, then the temperature rose suddenly after about 1 hr. and cooling was necessary to maintain it at 40-5°; after 50-60

min., the action slackened and the reaction was completed in 4-5 hrs. The process described for the preparation of II was carried out giving 1.75 g. crude octamethyl-N-acetylglucosaminol (1,3,5,6-tetra-O-methyl-2-deoxy-2-acetamido-4[2,3,4,6-tetra-O-methyl-D-galactopyranosyl]-D-sorbitol (IV), b. 200-10° (bath temperature); the pure product (1.50 g. after many distns.) b0.001 205-10°, $[\alpha]_{20D}$ -18.6° (c 1.4, CHCl3), n20D

1.4672. Acetyl-D-glucosamine (30 g.) in 120 cc. PhCH2OH (distilled over CaO, containing 0.5% HCl) heated to boiling under reflux 30 min., dry Et2O added to the cooled solution with vigorous shaking, the dark oily precipitate removed from the first Et2O extract by decantation, and 2.5-4 vols. Et2O added precipitated 30 g. light brown powder, which filtered off, washed several times with Et2O, and recrystd. from about 150 cc. hot EtOH yielded about 18 g. α -benzyl-N-acetyl-D-glucosaminide (V), m. 183-4°

(EtOH), $[\alpha]_{23D}$ 168.5° (c 1, H2O) [the corresponding

β -form m. 205-6°, $[\alpha]_{20D}$ -48° (H2O) (C.A. 49,

2332f)]. α -Benzyl glucoside (10 g.) and 10 g. finely powdered anhydrous

ZnCl2 dissolved under anhydrous conditions in 35 cc. BzH at 60°,

shaken 7-10 min., then kept at the same temperature 30 min., shaken well with 3 vols. H2O, and the precipitate from the brown reaction mixture filtered by

suction,

washed with H2O, then 20 cc. EtOH, and digested with 200 cc. dry Et2O yielded 9.4 g. almost colorless crude product, which recrystd. from 120 cc. hot C5H5N followed by 1-1.5 vols. hot H2O, and cooled yielded fine needles which were washed with 60 cc. C5H5N-H2O then with H2O. The yield of α -benzyl N-acetyl-4,6-benzylidene-D-glucosaminide (VI) was

6.7-7.9 g., after 2 more crystns. from C5H5N-H2O, VI m. 262°

(decomposition), $[\alpha]_{23D}$ 114° (c 1.1, C5H5N). VI (150 mg.)

dissolved in 2 cc. dry HCONMe2 with warming, treated with 0.5 cc. MeI and

0.5 g. BaO, shaken occasionally at room temperature 30 min., then warmed on a water bath 2 hrs. under reflux at 40-5°, the paste stirred

occasionally with a glass rod, the excess MeI removed in vacuo after 2

hrs. on the gradually cooling water bath, the residue treated with 10 cc.

ice H2O containing a drop of phenolphthalein solution, stirred well while

dilute

HCl was added until all particles were free from alkali, and the yellow crystalline residue quickly filtered off, washed with H2O, and covered with

C5H5N to remove the brown color formed by air gave 149 mg. crystalline

α -benzyl-N-acetyl-3-(O-methyl)-3,4,6-benzylidene-D-glucosaminide

(VII), recrystd. from hot C5H5N and a little hot H2O and dried

(130°/3 mm., P2O5) yielding 133.5 mg. product, colorless needles,

m. 272°, $[\alpha]_{20D}$ 96° (c 1, C5H5N); after repeated

recrystn. it m. 273° (PhMe), 271° (BuOH). VI (5.8 g.) in 50

cc. absolute C5H5N cooled to -20°, treated dropwise with 3.5 cc. BzCl,

kept 20 min. at -20° and 15 hrs. at 4°, then diluted with 500

cc. CHCl3, shaken 3 times with ice water, ice-cold 2N H2SO4, saturated NaHCO3

solution, and again with ice water, the organic phase dried with Na2SO4 and the

white, crystalline solid, recrystd. from 250 cc. C6H6 yielded 5.95 g.

α -benzyl-N-acetyl-3-benzoyl-4,6-benzylidene-D-glucosaminide (VIII),

m. 218-20°, $[\alpha]_{21D}$ 44° (c 1, C5H5N); by the addition of

ligroine, 0.6 g. was recovered from the mother liquor, giving a total of

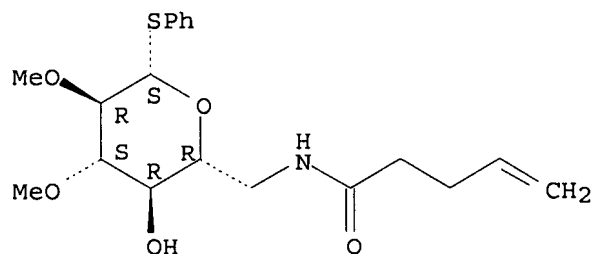
90%. VIII (5.9 g.) dissolved in 180 cc. AcOH on the steam bath, treated under reflux with 120 cc. H₂O, heated 30 min., the BzH split off, and AcOH removed in vacuo (bath temperature 40°), and the residue then evaporated many times with H₂O and PhMe yielded from C₆H₆ 3 g. α-benzyl-N-acetyl-3-benzoyl-D-glucosaminide (IX), [α]_D²⁵ 104° (C₅H₅N). The first crude product, [α] 96°, m. 80-3°, after several recrystns. from C₆H₆, m. 95-7°, [α]_D²³ 106° (c 1, C₅H₅N). IX (750 mg.) was shaken with 20 cc. HCONMe₂, 11 cc. MeI, and 10 g. Ag₂O 40 hrs. at room temperature, centrifuged, the solid phase washed twice with HCONMe₂, the solution treated with 5 vols. CHCl₃, kept overnight at 4°, the precipitate of Me₄NI.2AgI filtered off, and the filtrate shaken 4 times with H₂O, dried, evaporated in vacuo, and the oily residue chromatographed and eluted with ligroine (b. 70-80), 1:1 ligroine-Et₂O, and 1:1 Et₂O-Et₂Ac; the Et₂O contained 176 mg. optically active product, [α]_D²⁵ 105° (c 2, CHCl₃). After removal of the Bz group with MeOHNH₃, a sublimate of BzNH₃ was obtained at 100°/10-3 mm. and also a distillate at 180°, giving an unsatisfactory analysis for benzyl-di(O-methyl)-N-acetylglucosaminide (X). In another experiment 3 g. IX was shaken with 8 cc. HCONMe₂, 30 cc. MeI, and 30 g. Ag₂O 15 hrs. at room temperature, and the pasty mixture treated with excess CHCl₃ and worked up as before. Half of the product from CHCl₃ was distilled in a high vacuum immediately and an appreciable amount of HCONMe₂ appeared in the receiver; 2 distns. (5 + 10-3 mm., 160-180° bath temperature) gave 0.95 g. α-benzyl-N-acetyltrimethylglucosaminide, colorless oil, specific rotation 153° (c 2, CHCl₃), C₁₈H₂₇NO₆, which soon crystallized; recrystn. from 4:1 Et₂O:MeOH gave a product, m. 151-2° (sintering at 147°), [α]_D²³ 148° (c 2 and 0.5, CHCl₃).

AN 1958:65656 CAPLUS <<LOGINID::20071128>>
 DN 52:65656
 OREF 52:11750g-i,11751a-i,11752a-c
 TI The methylation of N-acetylglucosamine derivatives
 AU Kuhn, Richard; Baer, Hans Helmut; Seeliger, Annemarie
 SO Ann. (1958), 611, 236-41
 DT Journal
 LA Unavailable

L25 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Preparation of nitrate prodrugs able to release nitric oxide in a controlled and selective way and their use for prevention and treatment of inflammatory, ischemic and proliferative diseases
 IT 586348-09-6P 586350-39-2P 586350-62-1P
 586350-73-4P 586350-99-4P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of nitrate prodrugs for treating or preventing inflammatory, ischemic, degenerative, and proliferative diseases)
 RN 586348-09-6 CAPLUS
 CN D-Glucopyranoside, 4-[[2-(acetyloxy)benzoyl]oxy]butyl 2-[[2-(acetilamino)-3-methyl-3-(nitrosothio)-1-oxobutyl]amino]-2-deoxy- (CA INDEX NAME)

L25 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Preparation and use of glycoside-based ring structures with antimicrobial and cytostatic activity
 IT 511274-66-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and use of glycoside-based ring structures with antimicrobial and cytostatic activity)
 RN 511274-66-1 CAPLUS
 CN β-D-Glucopyranoside, phenyl 6-deoxy-2,3-di-O-methyl-6-[(1-oxo-4-pentenyl)amino]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L25 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

TI Intramolecular Hydrogen Abstraction Reaction Promoted by Alkoxy Radicals in Carbohydrates. Synthesis of Chiral 2,7-Dioxabicyclo[2.2.1]heptane and 6,8-Dioxabicyclo[3.2.1]octane Ring Systems

IT 476159-36-1P

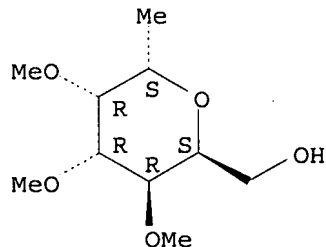
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intramol. hydrogen abstraction and reaction promoted by alkoxy radicals and cyclization in carbohydrates synthesis of chiral dioxabicycloheptane and dioxabicyclooctane ring systems)

RN 476159-36-1 CAPLUS

CN L-glycero-D-galacto-Heptitol, 2,6-anhydro-1-deoxy-3,4,5-tri-O-methyl- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L25 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

TI The methylation of N-acetylglucosamine derivatives

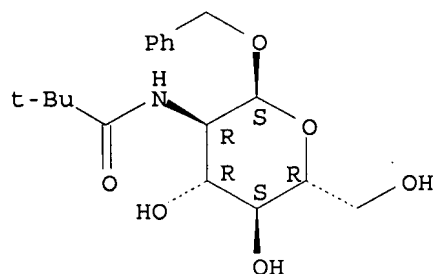
IT 909257-27-8P, Glucosaminide, benzyl N-acetyltrimethyl-, α -D-

RL: PREP (Preparation)
(preparation of)

RN 909257-27-8 CAPLUS

CN Glucosaminide, benzyl N-acetyltrimethyl-, α -D- (6CI) (CA INDEX NAME)

Absolute stereochemistry.



=> log hold

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

35.49

418.25

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-3.90

-3.90

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 12:39:02 ON 28 NOV 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *

SESSION RESUMED IN FILE 'CAPLUS' AT 13:05:39 ON 28 NOV 2007

FILE 'CAPLUS' ENTERED AT 13:05:39 ON 28 NOV 2007

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS) f

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

35.49

418.25

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-3.90

-3.90

=> file registry

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

35.49

418.25

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

ENTRY

SESSION

CA SUBSCRIBER PRICE

-3.90

-3.90

FILE 'REGISTRY' ENTERED AT 13:05:48 ON 28 NOV 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 27 NOV 2007 HIGHEST RN 956075-61-9

DICTIONARY FILE UPDATES: 27 NOV 2007 HIGHEST RN 956075-61-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

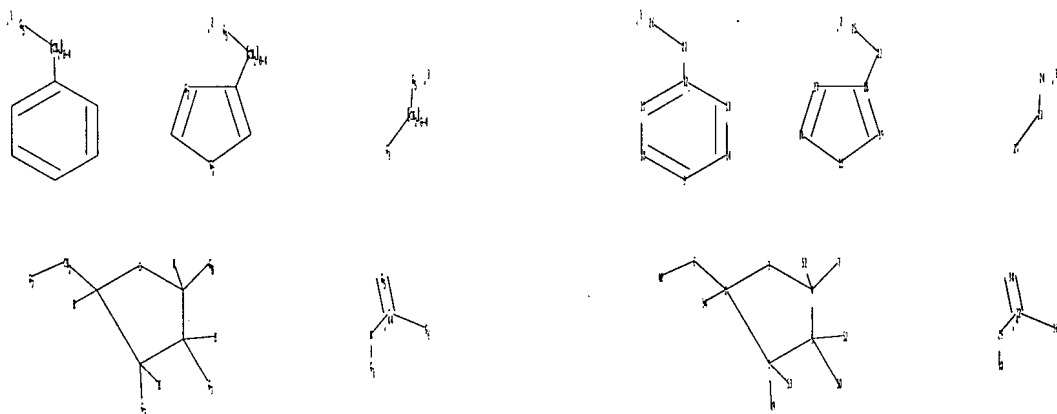
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdoc/properties.html>

=>

Uploading C:\Program Files\Stnexp\Queries\10524048verifylimitedb.str



chain nodes :

6 7 21 22 23 24 25 26 27 29 30 32 34 36 48 49 50 51 52 53 54

```

ring nodes :
1  2  3  4  5  9  10  11  12  13  14  15  16  17  18  19
chain bonds :
1-53  1-49  2-54  2-6  4-7  4-51  5-50  5-52  6-48  12-21  18-22  21-26  22-25
23-24
23-27  29-30  29-32  32-34  32-36
ring bonds :
1-5  1-2  2-3  3-4  4-5  9-10  9-14  10-11  11-12  12-13  13-14  15-16  15-19  16-17
17-18  18-19
exact/norm bonds :
1-53  1-5  1-49  1-2  2-54  2-3  2-6  3-4  4-5  4-7  4-51  5-50  5-52  6-48  12-21
15-16  15-19  16-17  17-18  18-19  18-22  21-26  22-25  23-24  23-27  29-30  29-32
32-34  32-36

normalized bonds :
9-10  9-14  10-11  11-12  12-13  13-14

```

G1:C,H

G2:C,N

G3:O,N

G4:C,S,P

G5:O,S

G6:C,O,N

G7:OH,MeO,EtO, [*1], [*2], [*3], [*4]

G8:CH3,Et,i-Pr, [*1], [*2], [*3]

```

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:CLASS  7:CLASS  9:Atom  10:Atom  11:Atom
12:Atom  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom  19:Atom  21:CLASS
22:CLASS  23:CLASS
24:CLASS  25:CLASS  26:CLASS  27:CLASS  29:CLASS  30:CLASS  32:CLASS  34:CLASS
36:CLASS  48:CLASS
49:CLASS  50:CLASS  51:CLASS  52:CLASS  53:CLASS  54:CLASS

```

L26 STRUCTURE UPLOADED

=> s 126

SAMPLE SEARCH INITIATED 13:06:13 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 117428 TO ITERATE

1.7% PROCESSED 2000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 2328260 TO 2368860
PROJECTED ANSWERS: 0 TO 0

L27 0 SEA SSS SAM L26

=> s 127 sss full

L27 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> s l26 sss full

FULL SEARCH INITIATED 13:06:53 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 2339655 TO ITERATE

42.7% PROCESSED 1000000 ITERATIONS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.06

103 ANSWERS

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**

PROJECTED ITERATIONS: 2339655 TO 2339655

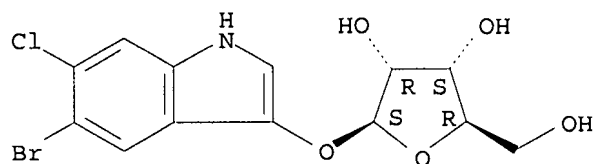
PROJECTED ANSWERS: 194 TO 286

L28 103 SEA SSS FUL L26

=> d l28 scan

L28 103 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN β -D-Ribofuranoside, 5-bromo-6-chloro-1H-indol-3-yl
MF C13 H13 Br Cl N O5

Absolute stereochemistry.

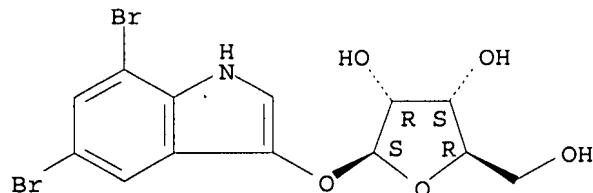


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L28 103 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN β -D-Ribofuranoside, 5,7-dibromo-1H-indol-3-yl
MF C13 H13 Br2 N O5

Absolute stereochemistry.

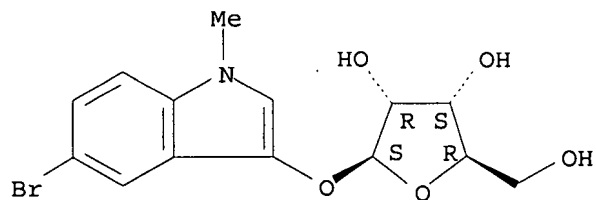


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L28 103 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN β -D-Ribofuranoside, 5-bromo-1-methyl-1H-indol-3-yl
MF C14 H16 Br N O5

Absolute stereochemistry.

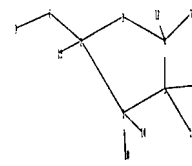
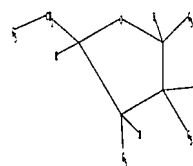


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>

Uploading C:\Program Files\Stnexp\Queries\10524048nonitrogen3b.str



chain nodes :
6 7 9 10 11 12 13 14 15 17 18 19 20 22
ring nodes :


```

1  2  3  4  5
chain bonds :
1-14  1-10  2-15  2-6  4-7  4-12  5-11  5-13  6-9  17-18  17-19  19-20  19-22
ring bonds :
1-5  1-2  2-3  3-4  4-5
exact/norm bonds :
1-5  1-10  1-2  2-3  3-4  4-5  4-7  5-11  6-9  17-19  19-20  19-22
exact bonds :
1-14  2-15  2-6  4-12  5-13  17-18

```

G5:O,S,[*1]

G6:CH3,CF3,O

```

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:CLASS  7:CLASS  9:CLASS  10:CLASS
11:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS
22:CLASS

```

L29 STRUCTURE UPLOADED

```

=> s l29 sub=l28
ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full
FULL SUBSET SEARCH INITIATED 13:07:58 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -        101 TO ITERATE

```

```

100.0% PROCESSED        101 ITERATIONS        101 ANSWERS
SEARCH TIME: 00.00.01

```

L30 101 SEA SUB=L28 SSS FUL L29

```

=> s l28 not l30
L31        2 L28 NOT L30

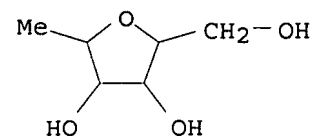
```

=> d l31 scan

```

L31  2 ANSWERS    REGISTRY    COPYRIGHT 2007 ACS on STN
IN    INDEX NAME NOT YET ASSIGNED
MF    C6 H12 O4

```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

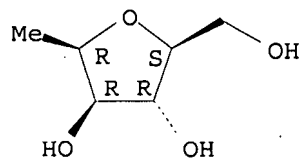
```

L31  2 ANSWERS    REGISTRY    COPYRIGHT 2007 ACS on STN
IN    Rhamnitol, 1,5-anhydro-, L- (5CI)

```

MF C6 H12 O4

Absolute stereochemistry.

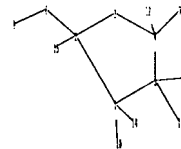
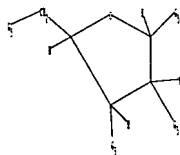


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=>

Uploading C:\Program Files\Stnexp\Queries\10524048nonitrogen2b.str



chain nodes :

6 7 9 10 11 12 13 14 15

ring nodes :

1 2 3 4 5

chain bonds :

1-14 1-10 2-15 2-6 4-7 4-12 5-11 5-13 6-9

ring bonds :

1-5 1-2 2-3 3-4 4-5

exact/norm bonds :

1-5 1-10 1-2 2-3 3-4 4-5 4-7 5-11 6-9
exact bonds :
1-14 2-15 2-6 4-12 5-13

G5:O,S

G6:CH3,CF3,O

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 9:CLASS 10:CLASS
11:CLASS
12:CLASS 13:CLASS 14:CLASS 15:CLASS

L32 STRUCTURE UPLOADED

=> s 32 sub=128

SUBSET IS IGNORED AS A SCOPE FOR THIS SEARCH

L33 144279 32

=> s 132 sub=128

ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full

FULL SUBSET SEARCH INITIATED 13:10:08 FILE 'REGISTRY'

FULL SUBSET SCREEN SEARCH COMPLETED - 100 TO ITERATE

100.0% PROCESSED 100 ITERATIONS

100 ANSWERS

SEARCH TIME: 00.00.01

L34 100 SEA SUB=L28 SSS FUL L32

=> s 128 not 134

L35 3 L28 NOT L34

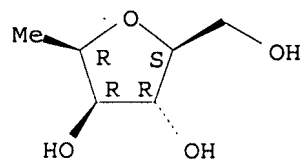
=> d 135 scan

L35 3 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN Rhamnitol, 1,5-anhydro-, L- (5CI)

MF C6 H12 O4

Absolute stereochemistry.



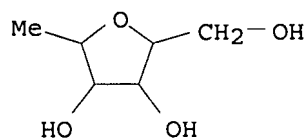
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L35 3 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN INDEX NAME NOT YET ASSIGNED

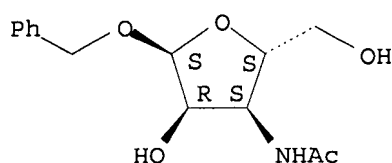
MF C6 H12 O4



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L35 3 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
 IN α -D-Ribofuranoside, phenylmethyl 3-(acetylamino)-3-deoxy-
 MF C14 H19 N O5

Absolute stereochemistry. Rotation (-).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
261.50	679.75

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
0.00	-3.90

CA SUBSCRIBER PRICE

FILE 'CAPLUS' ENTERED AT 13:10:32 ON 28 NOV 2007

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 28 Nov 2007 VOL 147 ISS 23

FILE LAST UPDATED: 27 Nov 2007 (20071127/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s l35

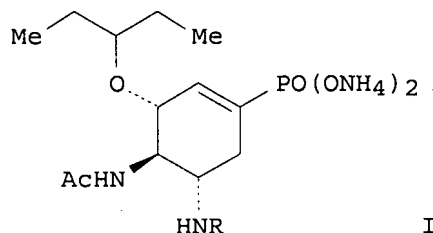
L36 2 L35

=> d l36 ti abs bib hitstr

L36 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN

TI Synthesis of Tamiflu and its Phosphonate Congeners Possessing Potent Anti-Influenza Activity

GI



I

AB Using D-xylose as an appropriate chiral precursor, we have synthesized active neuraminidase inhibitor oseltamivir, antifu drug Tamiflu, and novel phosphonate congeners I [R = H, C(NH₂):NH] that exhibit even stronger antifu activities by inhibiting the neuraminidases of the wild-type and H274Y mutant of H1N1 and H5N1 viruses. Mol. modeling of the neuraminidase-phosphonate complex indicates a pertinent binding mode of the phosphonate with three arginine residues in the active site. Discovery of such potent neuraminidase inhibitors will offer an opportunity to development of new anti-influenza drugs.

AN 2007:1018276 CAPLUS <<LOGINID::20071128>>

DN 147:385654

TI Synthesis of Tamiflu and its Phosphonate Congeners Possessing Potent Anti-Influenza Activity

AU Shie, Jiun-Jie; Fang, Jim-Min; Wang, Shi-Yun; Tsai, Keng-Chang; Cheng, Yih-Shyun E.; Yang, An-Suei; Hsiao, Shih-Chia; Su, Ching-Yao; Wong, Chi-Huey

CS The Genomics Research Center, Academia Sinica, Taipei, 11529, Taiwan

SO Journal of the American Chemical Society (2007), 129(39), 11892-11893
CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

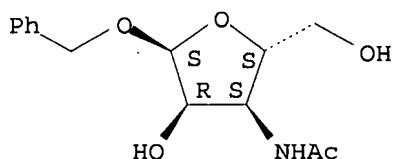
IT 949908-45-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(enantioselective synthesis and anti-influenza and cytotoxicity activities of Tamiflu, oseltamivir, the phosphonate congener, and the guanidine analogs)

RN 949908-45-6 CAPLUS

CN α -D-Ribofuranoside, phenylmethyl 3-(acetylamino)-3-deoxy- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 12:03:56 ON 28 NOV 2007)

FILE 'REGISTRY' ENTERED AT 12:04:25 ON 28 NOV 2007

L1 STRUCTURE UPLOADED
L2 50 S L1
L3 STRUCTURE UPLOADED
L4 50 S L3
L5 STRUCTURE UPLOADED
L6 7 S L5
L7 5095 S L5 SSS FULL
L8 STRUCTURE UPLOADED
L9 26 S L8
L10 92 S L8 SUB=L7 FULL
L11 STRUCTURE UPLOADED
L12 733 S L11 SUB=L7 FULL
L13 4362 S L7 NOT L12
L14 5003 S L7 NOT L10
L15 4356 S L13 NOT L10
L16 STRUCTURE UPLOADED
L17 266 S L16 SUB=L15 FULL
L18 STRUCTURE UPLOADED
L19 3591 S L18 SUB=L15 FULL
L20 765 S L15 NOT L19
L21 STRUCTURE UPLOADED
L22 3864 S L21 FULL SUB=L15
L23 492 S L15 NOT L22

FILE 'CAPLUS' ENTERED AT 12:29:58 ON 28 NOV 2007

L24 42 S L23
L25 5 S L24 AND (PY<2003 OR AY<2003 OR PRY<2003)

FILE 'REGISTRY' ENTERED AT 13:05:48 ON 28 NOV 2007

L26 STRUCTURE UPLOADED
L27 0 S L26
L28 103 S L26 SSS FULL
L29 STRUCTURE UPLOADED
L30 101 S L29 SUB=L28 FULL
L31 2 S L28 NOT L30
L32 STRUCTURE UPLOADED
L33 144279 S 32 SUB=L28
L34 100 S L32 SUB=L28 FULL
L35 3 S L28 NOT L34

FILE 'CAPLUS' ENTERED AT 13:10:32 ON 28 NOV 2007

L36 2 S L35

=> log hold

COST IN U.S. DOLLARS

SINCE FILE
ENTRY

TOTAL
SESSION

FULL ESTIMATED COST	5.74	685.49
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.78	-4.68

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 13:10:48 ON 28 NOV 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 13:11:41 ON 28 NOV 2007
FILE 'CAPLUS' ENTERED AT 13:11:41 ON 28 NOV 2007
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

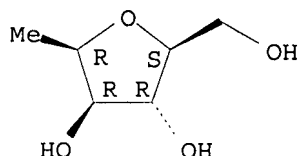
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	5.74	685.49
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.78	-4.68

=> d l36 2 ti abs bib hitstr

L36 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2007 ACS on STN
TI The reduction of acetylated glycopyranosyl bromides to
1,5-anhydroglycitols with lithium aluminum hydride. 1,5-Anhydro-L-
rhamnitrol
AB Addition of tetraacetyl- α -D-glucopyranosyl bromide in Et₂O (from 23.75
g. β -glucose pentaacetate) to 350 cc. 1.8 M LiAlH₄ in Et₂O, and after
30 min. addition of 400 cc. H₂O gave an optically inactive Et₂O layer which
was discarded; the aqueous filtrate was de-ionized with Amberlite-IR-120 and
Duolite A-4 and concentrated in vacuo to a sirup yielding from absolute EtOH
67%
1,5-anhydro-D-glucitol, m. and mixed m.p. 142-3°, [α]_{20D}
42.8° (H₂O, c 2.14). Addition of 40 g. Me α -D-mannopyranoside
to 268 cc, Ac₂O and 5.4 cc. concentrated H₂SO₄ at 0°, agitation 4 hrs. at
0°, standing 16 hrs. at room temperature, addition to ice, washing the CHCl₃
extract with aqueous NaHCO₃, concentration to a sirup, solution in absolute
EtOH, reconcn.
twice, and crystallization from Et₂O-isopentane gave 62% α -D-mannopyranose
pentaacetate (I), m. 73-4°, [α]_{20D} 55.2° (CHCl₃, c
2.2); this method gives better yields than previous preps. Reduction of
tetraacetyl- α -D-mannopyranosyl bromide (from 23.75 g. I) as above
with LiAlH₄ gave 67-74% 1,5-anhydro-D-mannitol, m. and mixed m.p.
155-7°, [α]_{20D} -49.8° (H₂O, c 2.13).
Triacetyl- α -L-rhamnopyranosyl bromide (from 14.6 g.
 β -tetraacetate) gave 76-8% 1,5-anhydro-L-rhamnitrol (II), m.
123-4°, [α]_{20D} 83.8° (c 0.97); II consumed 2.01 moles
Na₅IO₆, and 1.01 moles HCO₂H were liberated. Heating II, Ac₂O, and C₅H₅N
2 hrs. at 95° and crystallization of the distillate (b₃₋₄ 100-30°)
gave 36% triacetate, m. 61-2°, [α]_{20D} 48.1° (CHCl₃, c
1.26); tribenzoate, 89% from II with BzCl and C₅H₅N, m. 169-70°,
[α]_{20D} 279° (CHCl₃, c 0.98).

AN 1951:18963 CAPLUS <<LOGINID::20071128>>
 DN 45:18963
 OREF 45:3326h-i,3327a-b
 TI The reduction of acetylated glycopyranosyl bromides to
 1,5-anhydroglycitols with lithium aluminum hydride. 1,5-Anhydro-L-
 rhamnitol
 AU Ness, Robert K.; Fletcher, Hewitt G., Jr.; Hudson, C.S.
 CS U.S. Public Health Service, Bethesda, MD
 SO Journal of the American Chemical Society (1950), 72, 4547-9
 CODEN: JACSAT; ISSN: 0002-7863
 DT Journal
 LA Unavailable
 OS CASREACT 45:18963
 IT 911670-24-1, Rhamnitol, 1,5-anhydro-, L-
 (and esters)
 RN 911670-24-1 CAPLUS
 CN Rhamnitol, 1,5-anhydro-, L- (5CI) (CA INDEX NAME)

Absolute stereochemistry.



=> log hold

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
11.48	691.23

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-1.56	-5.46

CA SUBSCRIBER PRICE

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 13:12:03 ON 28 NOV 2007

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAEXO1623

PASSWORD:

* * * * * RECONNECTED TO STN INTERNATIONAL * * * * *
 SESSION RESUMED IN FILE 'CAPLUS' AT 13:36:19 ON 28 NOV 2007
 FILE 'CAPLUS' ENTERED AT 13:36:19 ON 28 NOV 2007
 COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)s

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
11.48	691.23

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION

CA SUBSCRIBER PRICE

-1.56

-5.46

=> s 120

L37 172 L20

=> s 137 and (PY<2003 or AY<2003 or PRY<2003)

22908413 PY<2003

4467638 AY<2003

3946524 PRY<2003

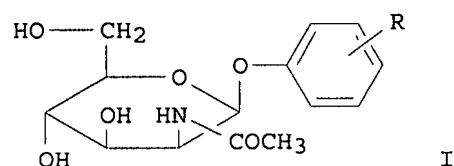
L38 29 L37 AND (PY<2003 OR AY<2003 OR PRY<2003)

=> d 138 1-29 ti abs bib hitstr

L38 ANSWER 1 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Phenyl 2-acetamido-2-deoxy-D-mannopyranosides and process of their preparation

GI



AB The title compds. (I; R = H, o-NO₂, m-NO₂, p-NO₂) that have β-configuration on anomeric center and can be used as immunomodulating agents (no data), were prepared by deacetalization of nitrophenyl 2-azido-2-deoxy-4,6-benzylidene-β-D-mannopyranoside with aqueous AcOH, acetylation of the intermediate mannopyranoside, converting the 2-azido group to acetamido group by reduction with Ph₃P and acetylation of the amino group, and finally de-O-acetylation of the compound with NaOMe in MeOH. Thus, p-nitrophenyl 2-acetamido-2-deoxy-β-D-mannopyranoside was prepared as described above.

AN 2005:1095376 CAPLUS <<LOGINID::20071128>>

DN 143:440685

TI Phenyl 2-acetamido-2-deoxy-D-mannopyranosides and process of their preparation

IN Kren, Vladimir; Krist, Pavel

PA Mikrobiologicky Ustav AV CR, Czech Rep.

SO Czech Rep., 5 pp.

CODEN: CZXXED

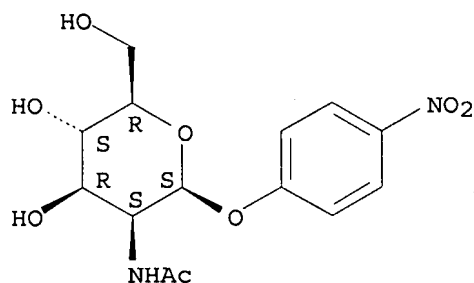
DT Patent

LA Czech

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CZ 295414	B6	20050817	CZ 2002-3206	20020925 <--
PRAI	CZ 2002-3206		20020925	<--	
OS	MARPAT 143:440685				
IT	570412-15-6P				
	RL: SPN (Synthetic preparation); PREP (Preparation)				
	(preparation of Ph 2-acetamido-2-deoxy-β-D-mannopyranosides)				
RN	570412-15-6 CAPLUS				
CN	β-D-Mannopyranoside, 4-nitrophenyl 2-(acetylamino)-2-deoxy- (CA INDEX NAME)				

Absolute stereochemistry. Rotation (-).



L38 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Test media and quantitative or qualitative method for identification and differentiation of biological materials in a test sample

AB This article discloses a test medium and method for detecting, quantifying, identifying and differentiating up to four (4) sep. biol. materials in a test sample. A test medium is disclosed which allows quantifying and differentiating under ambient light aggregates of biol. entities producing specific enzymes, which might include general coliforms, E. coli, Aeromonas, and Salmonella in a single test medium. A new class of nonchromogenic substrates is disclosed which produce a substantially black, non-diffusible precipitate This precipitate is not subject to interference from other chromogenic substrates present in the test medium. In one embodiment, the substrates are selected such that E. coli colonies present in the test medium show as substantially black, general coliforms colonies show in the test medium as a blue-violet color, Aeromonas colonies present in the test medium show as a generally red-pink color, and Salmonella colonies show as a generally teal-green color. Other microorganisms and color possibilities for detection and quantification thereof are also disclosed. An inhibitor and method for making a test medium incorporating the inhibitor are disclosed.

AN 2005:983698 CAPLUS <<LOGINID::20071128>>

DN 143:263089

TI Test media and quantitative or qualitative method for identification and differentiation of biological materials in a test sample

IN Roth, Geoffrey N.; Roth, Jonathan N.

PA Micrology Laboratories, Llc, USA

SO U.S. Pat. Appl. Publ., 23 pp., Cont.-in-part of U.S. Ser. No. 867,393.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005196825	A1	20050908	US 2005-96908	20050401 <--
	US 6350588	B1	20020226	US 1999-357606	19990720 <--
	US 2002090668	A1	20020711	US 2002-40791	20020107 <--
	US 6787332	B2	20040907		
	US 2004235087	A1	20041125	US 2004-867393	20040614 <--
	US 7273719	B2	20070925		
	AU 2006232967	A1	20061012	AU 2006-232967	20060321
	WO 2006107583	A1	20061012	WO 2006-US10177	20060321
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,				

IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

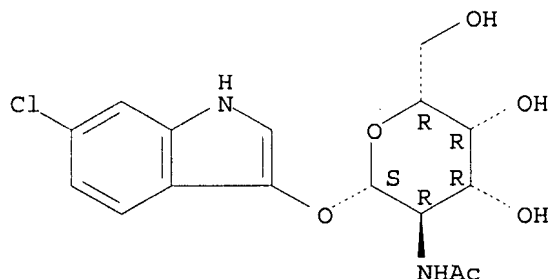
PRAI US 1999-357606 A1 19990720 <--
 US 2002-40791 A2 20020107 <--
 US 2004-867393 A2 20040614
 US 2005-96908 A 20050401
 WO 2006-US10177 W 20060321

IT 501432-61-7 863879-99-6
 RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST
 (Analytical study); BIOL (Biological study); USES (Uses)
 (test media and quant. or qual. method for identification and
 differentiation of biol. materials in a test sample)

RN 501432-61-7 CAPLUS

CN β -D-Galactopyranoside, 6-chloro-1H-indol-3-yl 2-(acetylamino)-2-deoxy-
 (CA INDEX NAME)

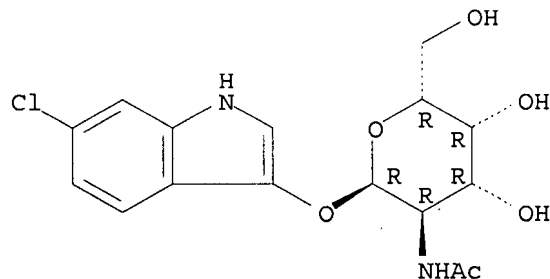
Absolute stereochemistry.



RN 863879-99-6 CAPLUS

CN α -D-Galactopyranoside, 6-chloro-1H-indol-3-yl 2-(acetylamino)-2-deoxy-
 (CA INDEX NAME)

Absolute stereochemistry.



L38 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Processes for the production of amino-alkyl glucosaminide phosphate and
 disaccharide immunoeffectors, and intermediates therefor via glycosylation
 reaction

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB This invention relates to processes for production of alkylamino glucosaminide phosphate compds., and of disaccharide compds. I, wherein PG is a protecting group that forms an ester, an ether, or a carbonate with the oxygen atom of a hydroxy group or that forms an amide or a carbonate with the nitrogen atom of an amino group, including various novel intermediates and intermediate processes. In one aspect, glycosyl halides are produced by reaction of an O-silyl glycoside with a dihalo-Me alkyl ether. Thus, amino glycoside II was prepared via glycosylation reaction.

AN 2005:431458 CAPLUS <<LOGINID::20071128>>

DN 142:463966

TI Processes for the production of amino-alkyl glucosaminide phosphate and disaccharide immunoeffectors, and intermediates therefor via glycosylation reaction

IN Johnson, David A.; Johnson, Craig L.; Bazin-Lee, Helene G.; Sowell, C. Gregory

PA Corixa Corporation, A Corporation of the State of Delaware, USA

SO U.S. Pat. Appl. Publ., 32 pp., Cont.-in-part of U.S. Ser. No. 472,991.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005107600	A1	20050519	US 2004-897194	20040721 <--
	US 7288640	B2	20071030		
	WO 2004005308	A2	20040115	WO 2003-US21504	20030708 <--
	WO 2004005308	A3	20040422		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004267007	A1	20041230	US 2004-472991	20040812 <--
US 7232900	B2	20070619		
ZA 2005000689	A	20060830	ZA 2005-689	20050124 <--
WO 2006012425	A2	20060202	WO 2005-US25894	20050721
WO 2006012425	A3	20061005		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRAI	US 2002-394487P	P	20020708	<--
	WO 2003-US21504	W	20030708	
	US 2004-472991	A2	20040812	
	US 2003-438585P	P	20030106	
	US 2004-897194	A	20040721	

OS CASREACT 142:463966; MARPAT 142:463966

IT 640291-36-7P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

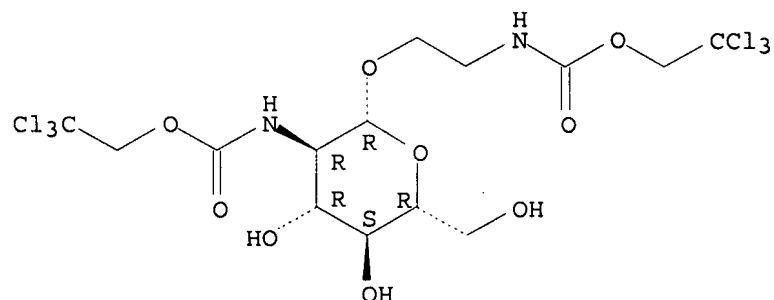
(processes for the production of amino-alkyl glucosaminide phosphate and

disaccharide immunoeffectors, and intermediates therefor via glycosylation reaction)

RN 640291-36-7 CAPLUS

CN Carbamic acid, [2-[[2-deoxy-2-[[[(2,2,2-trichloroethoxy)carbonyl]amino]-β-D-glucopyranosyl]oxy]ethyl]-, 2,2,2-trichloroethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 851445-29-9P 851445-37-9P

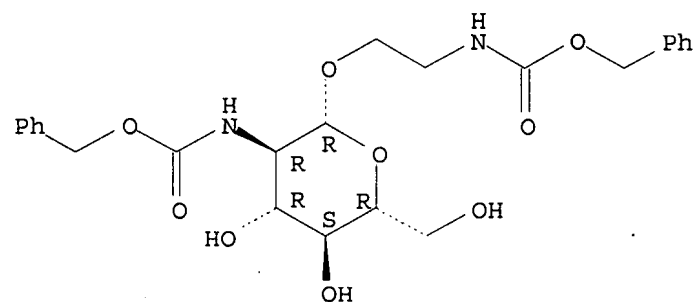
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(processes for the production of amino-alkyl glucosaminide phosphate and disaccharide immunoeffectors, and intermediates therefor via glycosylation reaction)

RN 851445-29-9 CAPLUS

CN Carbamic acid, [2-[[2-deoxy-2-[[[(phenylmethoxy)carbonyl]amino]-β-D-glucopyranosyl]oxy]ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

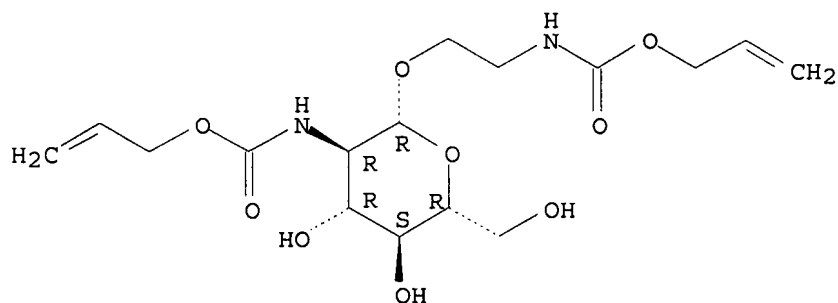
Absolute stereochemistry.



RN 851445-37-9 CAPLUS

CN Carbamic acid, [2-[[2-deoxy-2-[[[(2-propenyloxy)carbonyl]amino]-β-D-glucopyranosyl]oxy]ethyl]-, 2-propenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L38 ANSWER 4 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Glycorandomization and production of novel vancomycin analogs

AB The present invention provides combinatorial methods for rapidly generating a diverse library of glycorandomized structures, comprising incubating 1 or more aglycons and a pool of NDP-sugars in the presence of a glycosyltransferase. The glycosyltransferase may be one that is associated with or involved in production of natural secondary metabolites, or one which is putatively associated with or involved in production of natural secondary metabolites. The glycosyltransferase may show significant flexibility with respect to its NDP-sugar donors and/or its aglycons. NDP-sugar donors may be com. available, or may be produced by utilizing mutant or wild type nucleotidyltransferases with significant flexibility with respect to their substrates.

AN 2004:1126986 CAPLUS <<LOGINID::20071128>>

DN 142:73491

TI Glycorandomization and production of novel vancomycin analogs

IN Thorson, Jon

PA Wisconsin Alumni Research Foundation, USA

SO U.S. Pat. Appl. Publ., 79 pp., Cont.-in-part of U.S. Ser. No. 109,672.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004259228	A1	20041223	US 2003-670073	20030924 <--
	US 2003068669	A1	20030410	US 2002-109672	20020401 <--
	US 6884604	B2	20050426		
	US 2005266523	A1	20051201	US 2005-907692	20050412 <--
	US 2005239689	A1	20051027	US 2005-908624	20050519 <--
	US 7259141	B2	20070821		
PRAI	US 2001-279682P	P	20010330	<--	
	US 2002-109672	A2	20020401	<--	
	US 2003-670073	A2	20030924		

OS CASREACT 142:73491

IT 666219-68-7P

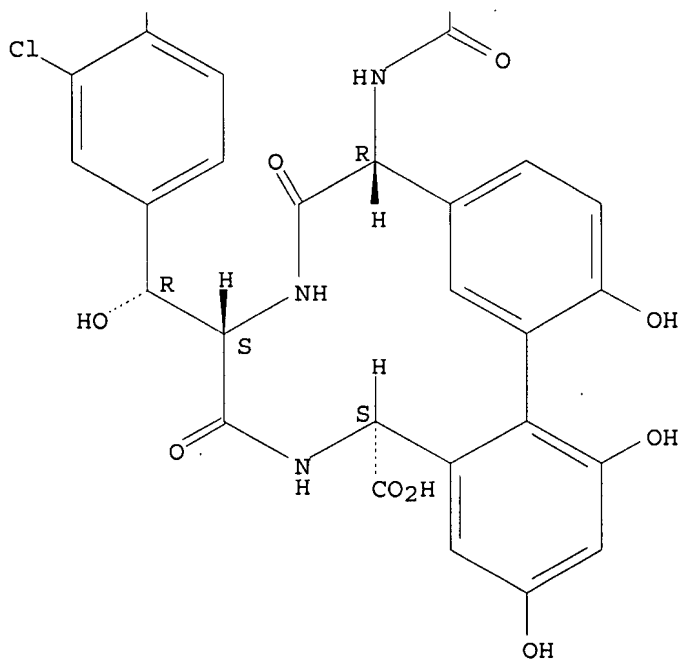
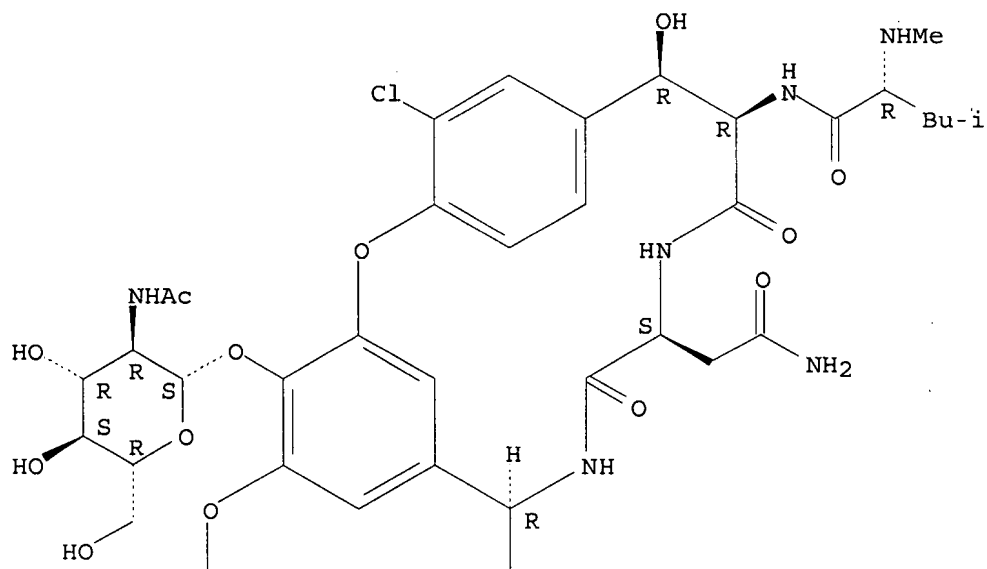
RL: BCP (Biochemical process); BPN (Biosynthetic preparation); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

(glycorandomization and production of novel vancomycin analogs)

RN 666219-68-7 CAPLUS

CN Vancomycin, 2'-(acetylamino)-2'-de[(3-amino-2,3,6-trideoxy-3-C-methyl- α -L-lyxo-hexopyranosyl)oxy]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The present invention relates to methods of treating cancer using a combination of at least two Akt inhibitors I [wherein Q = (un)substituted heterocyclyl, aryl; U, V, W, and X = independently CH, N; Y, Z = independently CH, N, provided that at least one of Y and Z = N; n = 0-3; p = 0-2; q = 0-4; R1, R2, R7 = independently halo, CN, OH, CHO, NO2, or (un)substituted (cyclo)alkyl(oxy), alkenyl(oxy), alkynyl(oxy), heterocyclyl(oxy), acyl, carboxy, carbamoyl(oxy), ureido, sulfamoyl, etc.; R3, R4 = independently H, (perfluoro)alkyl; or CR3R4 = cycloalkyl, heterocyclyl; and pharmaceutically acceptable salts or stereoisomers thereof] or a combination of I and a protein kinase inhibitor II [wherein G = H2, O; X = C, N, SO0-2, O; m = 0-2; n = 0-2; p = 0-6; q = 0-4; R1 = independently H, halo, or (un)substituted (cyclo)alkyl, heterocyclyl, aryl, carbamoyl, amino, acyl, sulfamoyl, carboxy, etc.; R2 = H or (un)substituted (cyclo)alkyl(oxy), amino, aryloxy, heterocyclyloxy, alkenyloxy, alkynyloxy, etc.; R5 = independently H, halo, NO2, CN, or (un)substituted alkyl, alkenyl, alkynyl, carboxy, acyl, sulfamoyl, carbamoyl, ureido, amino, etc.; and pharmaceutically acceptable salts or stereoisomers thereof], optionally in combination with a third compound. Examples include syntheses for I and II and assays demonstrating Akt inhibitor activity, antitumor activity, and the synergistic effect of combinations of AKT inhibitors and/or protein kinase inhibitors on caspase 3 activity. For instance, III•HCl was prepared in an 8-step reaction sequence culminating with the cycloaddn. of 4-(2-aminoprop-2-yl)benzil and o-phenylenediamine using glacial acetic acid in H2O, followed by work up with chloroform and ethanolic HCl. III•HCl, a selective Akt1 and Akt2 inhibitor, demonstrated a 3.2-fold in caspase 3 activation over control compared to a 1.2-fold increase for a protein kinase inhibitor. Combination treatment produced a 9-fold increase in caspase 3 activation.

AN 2004:433750 CAPLUS <<LOGINID::20071128>>

DN 141:7131

TI Preparation of quinazolines and analogs as Akt inhibitors and indoles as protein kinase inhibitors for use in synergistic combination therapy for the treatment of cancer

IN Barnett, Stanley F.; Defeo-Jones, Deborah D.; Hartman, George D.; Huber, Hans E.; Stirdivant, Steven M.; Heimbrook, David C.

PA USA

SO U.S. Pat. Appl. Publ., 121 pp., which
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2004102360	A1	20040527	US 2003-678565	20031003 <--
PRAI	US 2002-422312P	P	20021030	<--	
	US 2003-460911P	P	20030407		

OS MARPAT 141:7131

IT 612848-63-2P 612848-65-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antitumor agent; preparation of quinazolines and analogs as Akt inhibitors and indoles as protein kinase inhibitors for use in synergistic combination therapy for treatment of cancer)

RN 612848-63-2 CAPLUS

CN 2H-Benzimidazol-2-one, 1-[1-[[4-[6-[[2-(acetylamino)-2-deoxy-D-glucopyranosyl]oxy]-3-phenyl-2-quinoxaliny]]phenyl]methyl]-4-piperidinyl]-1,3-dihydro-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

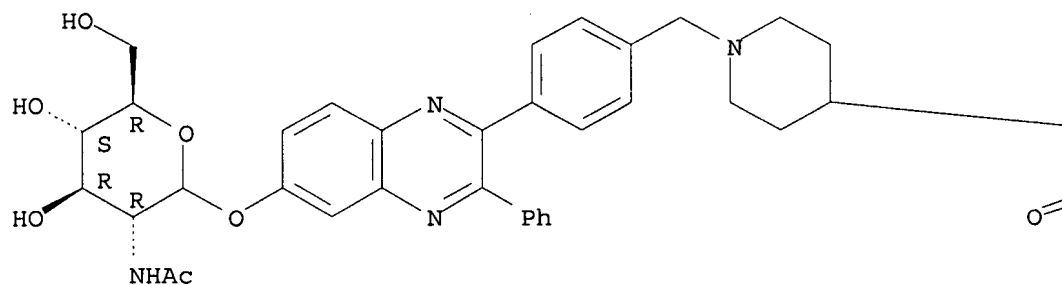
CM 1

CRN 612848-62-1

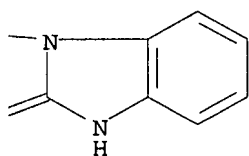
CMF C41 H42 N6 O7

Absolute stereochemistry.

PAGE 1-A



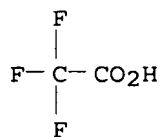
PAGE 1-B



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 612848-65-4 CAPLUS

CN 2H-Benzimidazol-2-one, 1-[1-[[4-[7-[[2-(acetylamino)-2-deoxy-D-glucopyranosyl]oxy]-3-phenyl-2-quinoxaliny]]phenyl]methyl]-4-piperidinyl]-1,3-dihydro-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

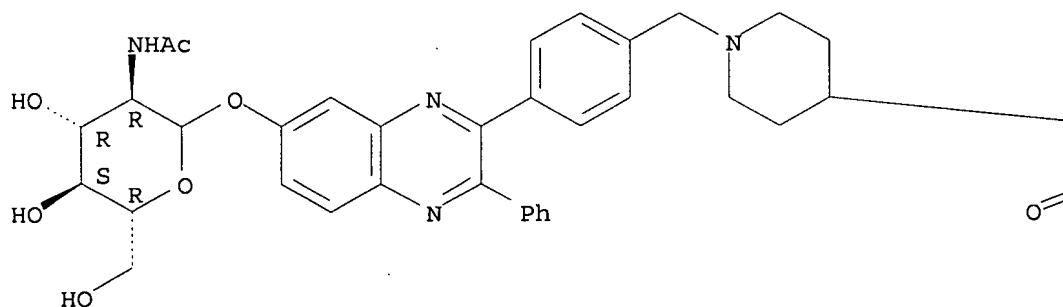
CM 1

CRN 612848-64-3

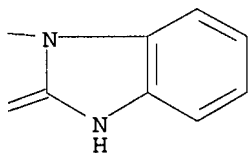
CMF C41 H42 N6 O7

Absolute stereochemistry.

PAGE 1-A



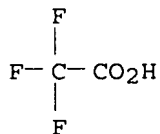
PAGE 1-B



CM 2

CRN 76-05-1

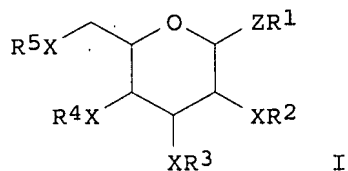
CMF C2 H F3 O2



L38 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Tetrahydropyran compounds that interact with G protein-coupled receptors (GPCRs)

GI



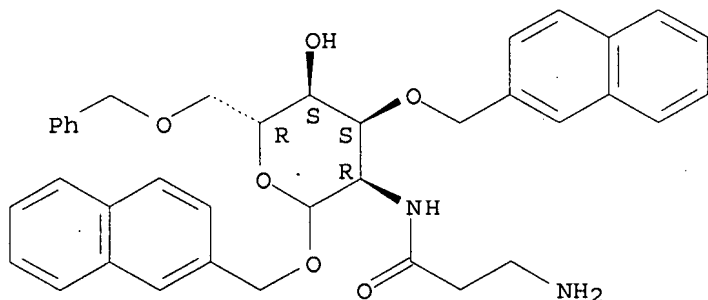
AB The invention discloses a method of inhibiting or effecting the activity of a GPCR which comprises contacting a GPCR with a compound I [Z = S, O, NRA (RA = R1-R5, C1-15 acyl, etc.); X = O, NRA; R1-R5 = H, C1-12 alkyl, C4-15

aryl, etc.; with provisos; ring may be of any configuration], or a pharmaceutically acceptable salt thereof. Libraries of compds. of the invention were tested for activity in assays using melanocortin and somatostatin receptors.

AN 2004:333585 CAPLUS <<LOGINID::20071128>>
 DN 140:350624
 TI Tetrahydropyran compounds that interact with G protein-coupled receptors (GPCRs)
 IN Meutermans, Wim; Thanh, Giang Le; Abbenante, Giovanni; Tometzki, Gerald; Halliday, Judy; Zeugg, Johannes
 PA Alchemia Pty. Ltd., Australia
 SO PCT Int. Appl., 62 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004032940	A1	20040422	WO 2003-AU1347	20031010 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2499677	A1	20040422	CA 2003-2499677	20031010 <--
	AU 2003266858	A1	20040504	AU 2003-266858	20031010 <--
	EP 1549325	A1	20050706	EP 2003-747740	20031010 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1703228	A	20051130	CN 2003-80101113	20031010 <--
	JP 2006504718	T	20060209	JP 2004-542106	20031010 <--
	US 2006223764	A1	20061005	US 2003-530851	20031010 <--
	IN 2005KN00858	A	20060609	IN 2005-KN858	20050511 <--
PRAI	AU 2002-951995	A	20021011	<--	
	WO 2003-AU1347	W	20031010		
OS	MARPAT 140:350624				
IT	681150-90-3				
	RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (202tetrahydropyran compds. that interact with G protein-coupled receptors)				
RN	681150-90-3 CAPLUS				
CN	D-Allopyranoside, 2-naphthalenylmethyl 2-[(3-amino-1-oxopropyl)amino]-2-deoxy-3-O-(2-naphthalenylmethyl)-6-O-(phenylmethyl)- (CA INDEX NAME)				

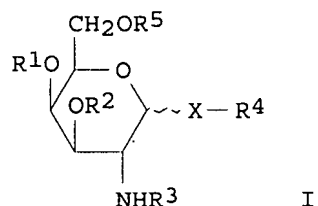
Absolute stereochemistry.



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 7 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Preparation of O-sulfogalactosamine derivatives as sulfotransferase
 inhibitors
 GI



AB O-sulfogalactosamine derivs. represented by the following general formula (I) (wherein R1, R2 and R5 independently represent each SO3- or H, provided that at least one of them represents SO3-; R3 represents H, acetyl or SO3-; R4 represents H, optionally substituted alkyl, alkenyl, alkynyl, acyl, aryl or aralkyl; X represents O, S, NH or CH2; and the wavy line represents an α -bond or a β -bond) are prepared Also disclosed is a sulfotransferase (GalNAc4S6ST) inhibitor containing the derivative

I and a remedy for the treatment and/or prevention of diseases caused by increased activity of sulfotransferase. The above diseases may include allergy, inflammation, or nerve disease or disorders. Thus, 40.4 mg Ph 2-acetamido-2-deoxy- β -D-galactopyranoside was dissolved in 2.0 cm³, treated with 44.5 mg sulfur trioxide-pyridine complex, stirred at 24° for 6 h, and treated with 1.5 cm³ MeOH. The reaction mixture was passed through Dowex 50W (Na+), centrifuged, concentrated in vacuo, purified HPLC using an ion exchange resin (PARTISILOSAX) and gel filtration using a Supaerdex 30 column to give 9% Ph 6-O-sulfo-2-acetamido-2-deoxy- β -D-galactopyranoside sodium salt. The compds. I inhibited sulfotransferase at 50, 125, and 250 nmol.

AN 2004:60525 CAPLUS <<LOGINID::20071128>>

DN 140:111634

TI Preparation of O-sulfogalactosamine derivatives as sulfotransferase inhibitors

IN Habuchi, Osami; Nakano, Hirofumi; Sawada, Toshihiko; Fujii, Sonoko; Ohtake, Shiori

PA Seikagaku Corporation, Japan

SO PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DT Patent

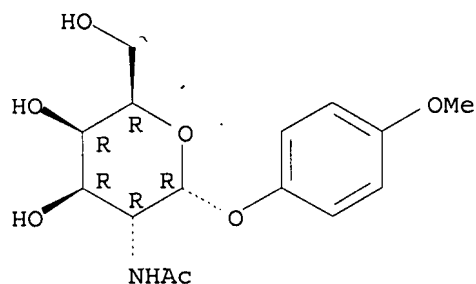
LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004007515	A1	20040122	WO 2003-JP8785	20030710 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2492196	A1	20040122	CA 2003-2492196	20030710 <--

AU 2003252593 A1 20040202 AU 2003-252593 20030710 <--
 EP 1541580 A1 20050615 EP 2003-764162 20030710 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 US 2006128659 A1 20060615 US 2006-520659 20060110 <--
 PRAI JP 2002-201843 A 20020710 <--
 JP 2002-382122 A 20021227 <--
 WO 2003-JP8785 W 20030710
 OS MARPAT 140:111634
 IT 646535-16-2
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of O-sulfogalactosamine derivs. as sulfotransferase inhibitors
 for treatment or prevention of diseases caused by increased activity of
 sulfotransferase)
 RN 646535-16-2 CAPLUS
 CN α -D-Galactopyranoside, 4-methoxyphenyl 2-(acetylamino)-2-deoxy- (CA
 INDEX NAME)

Absolute stereochemistry.



RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 8 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Processes for the production of aminoalkyl glucosaminide phosphate and
 disaccharide immuno-effectors, and intermediates therefor
 GI



AB This invention relates to processes for production of alkylamino glucosaminide
 phosphate compds., and of disaccharide compds., including various novel
 intermediates and intermediate processes. Reaction of an O-silyl
 glycoside I, wherein R has the formula R1R2R3Si, in which R1-R3 are
 independently selected from the group consisting of C1-C6 alkyl, C3-C6
 cycloalkyl and optionally substituted Ph; PG represents a protecting group
 that forms an ester, an ether or a carbonate with the oxygen atom of a
 hydroxy group or that forms an amide or a carbamate with the nitrogen atom
 of an amino group, resp., with a dihalo-Me alkyl ether gave glycosyl

halides I,. In one aspect, glycosyl halides I, wherein A is Cl, Br, F are produced by reaction of an O-silyl glycoside I with a dihalo-Me alkyl ether. Thus, 2-deoxy-4-O-diphenylphosphono-3-O-[(R)-3-tetradecanoyloxytetradecanoyl]-6-O-(2,2,2-trichloro-1,1-dimethylethoxycarbonyl)-2-(2,2,2-trichloroethoxycarbonylamino)- α -D-glucopyranosyl chloride was prepared from D-glucosamine hydrochloride via chlorination reaction.

AN 2004:41489 CAPLUS <<LOGINID::20071128>>

DN 140:77363

TI Processes for the production of aminoalkyl glucosaminide phosphate and disaccharide immuno-effectors, and intermediates therefor

IN Johnson, David A.; Johnson, Craig L.; Bazin-Lee, Helene G.; Sowell, C. Gregory

PA Corixa Corporation, USA

SO PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DT Patent

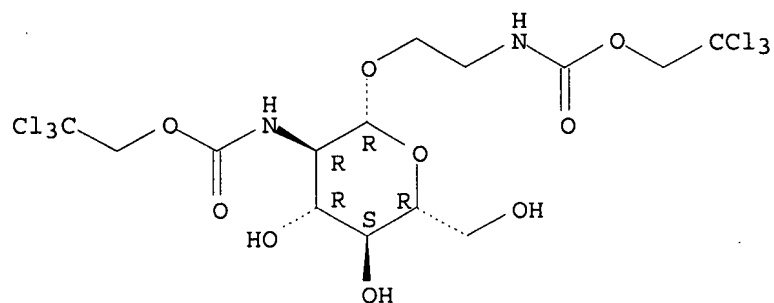
LA English

FAN.CNT 4

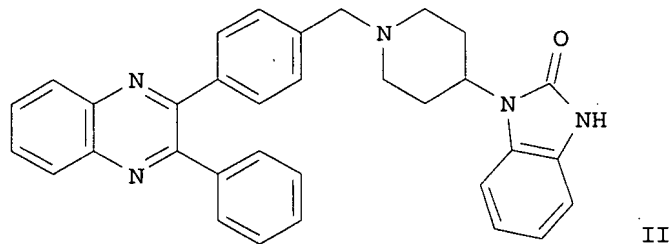
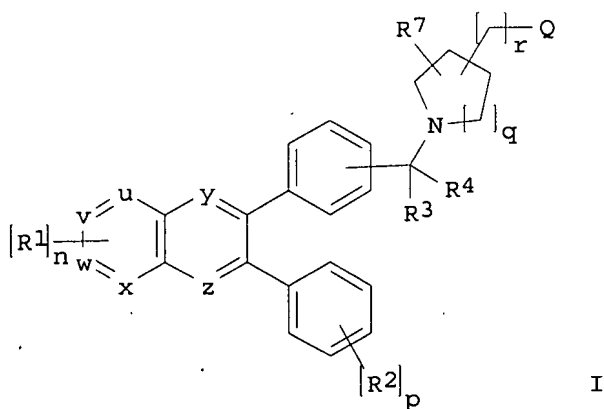
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
PI	WO 2004005308	A2	20040115	WO 2003-US21504	20030708 <--	
	WO 2004005308	A3	20040422			
	W:			AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW		
	RW:			GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	CA 2492446	A1	20040115	CA 2003-2492446	20030708 <--	
	AU 2003251824	A2	20040123	AU 2003-251824	20030708 <--	
	AU 2003251824	A1	20040123			
	EP 1521762	A2	20050413	EP 2003-763418	20030708 <--	
	R:			AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK		
	BR 2003012656	A	20050607	BR 2003-12656	20030708 <--	
	CN 1675231	A	20050928	CN 2003-819800	20030708 <--	
	JP 2005536493	T	20051202	JP 2004-520086	20030708 <--	
	NZ 537655	A	20061222	NZ 2003-537655	20030708 <--	
	US 2005107600	A1	20050519	US 2004-897194	20040721 <--	
	US 7288640	B2	20071030			
	US 2004267007	A1	20041230	US 2004-472991	20040812 <--	
	US 7232900	B2	20070619			
	MX 2005PA00407	A	20050419	MX 2005-PA407	20050107 <--	
	ZA 2005000689	A	20060830	ZA 2005-689	20050124 <--	
	IN 2005CN00143	A	20070330	IN 2005-CN143	20050207 <--	
	IN 2006CN03869	A	20070615	IN 2006-CN3869	20061019 <--	
PRAI	US 2002-394487P	P	20020708	<--		
	US 2003-438585P	P	20030106			
	WO 2003-US21504	W	20030708			
	US 2004-472991	A2	20040812			
	IN 2005-CN143	A3	20050207			
OS	MARPAT 140:77363					
IT	640291-36-7P					
	RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)					
	(processes for production of aminoalkyl glucosaminide phosphate and disaccharide potential immunoeffectors via silylation and halogenation reactions)					
RN	640291-36-7 CAPLUS					

CN Carbamic acid, [2-[[2-deoxy-2-[[[(2,2,2-trichloroethoxy)carbonyl]amino]- β -D-glucopyranosyl]oxy]ethyl]-, 2,2,2-trichloroethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L38 ANSWER 9 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Preparation of 2,3-diphenylquinoxaline derivatives as inhibitors of Akt activity for treating cancer
 GI



AB The title compds. comprising a 2,3-diphenylquinoxaline moiety [I; u, v, w and x = CH, N; y, z = CH, N (provided that at least one of y and z = N); Q = NR5R6, (un)substituted aryl, heterocyclyl; R1 = alkenyl, halo, CN, etc.; R2 = OH, CN, CO2H, etc.; R3, R4 = H, alkyl, perfluoroalkyl; or R3 and R4 are combined to form (CH2)t wherein one of the carbon atoms is optionally

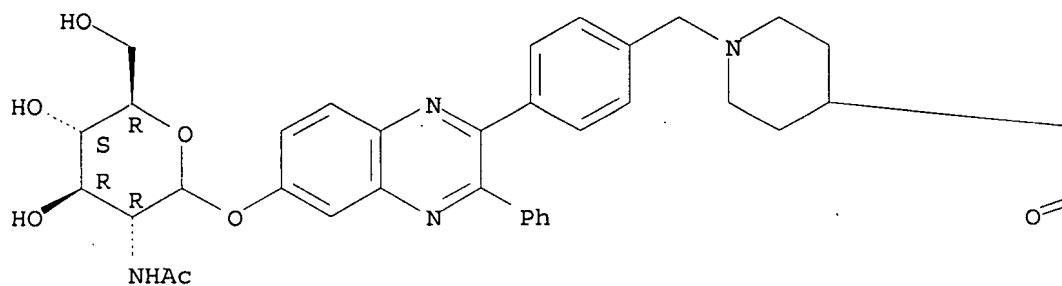
replaced by O, SOM, (un)substituted NHCO, N(COH); R5, R6 = H, aryl, heterocyclyl, etc.; or NR5R6 = monocyclic or bicyclic heterocycle; R7 = halo, CN, CO2H, etc.; n = 0-3; p = 0-2; t = 2-6; m = 0-2; q = 0-4; r = 0-1] and their salts which inhibit the activity of Akt, a serine/threonine protein kinase, were prepared E.g., a 2-step synthesis of the quinoxaline II [starting from 4-bromomethylbenzil and 4-(2-keto-1-benzimidazoliny)l)piperidine], was given. The exemplified compds. I were found to have IC50 of $\leq 50 \mu\text{M}$ against one or more of Akt1, Akt2 and Akt3. The invention is further directed to chemotherapeutic compns. containing the compds. I and methods for treating cancer comprising administration of the compds. I.

AN 2003:836848 CAPLUS <<LOGINID::20071128>>
 DN 139:350754
 TI Preparation of 2,3-diphenylquinoxaline derivatives as inhibitors of Akt activity for treating cancer
 IN Bilodeau, Mark T.; Duggan, Mark E.; Hartnett, John C.; Lindsley, Craig W.; Manley, Peter J.; Wu, Zhicai; Zhao, Zhijian
 PA Merck & Co., Inc., USA
 SO PCT Int. Appl., 228 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

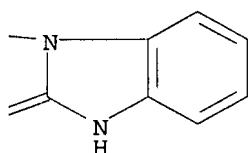
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003086394	A1	20031023	WO 2003-US10442	20030404 <--
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2480800	A1	20031023	CA 2003-2480800	20030404 <--
	AU 2003223467	A1	20031027	AU 2003-223467	20030404 <--
	AU 2003223467	B2	20071004		
	EP 1496896	A1	20050119	EP 2003-719597	20030404 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2005533010	T	20051104	JP 2003-583413	20030404 <--
	US 2005222155	A1	20051006	US 2004-510069	20041004 <--
	US 7223738	B2	20070529		
PRAI	US 2002-370847P	P	20020408	<--	
	US 2002-417174P	P	20021009	<--	
	WO 2003-US10442	W	20030404		
OS	MARPAT 139:350754				
IT	612848-62-1P 612848-63-2P 612848-64-3P 612848-65-4P				
	RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)				
	(preparation of 2,3-diphenylquinoxaline derivs. as inhibitors of Akt activity for treating cancer)				
RN	612848-62-1 CAPLUS				
CN	2H-Benzimidazol-2-one, 1-[1-[[4-[6-[[2-(acetylamino)-2-deoxy-D-glucopyranosyl]oxy]-3-phenyl-2-quinoxaliny]phenyl]methyl]-4-piperidinyl]-1,3-dihydro- (CA INDEX NAME)				

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RN 612848-63-2 CAPLUS

CN 2H-Benzimidazol-2-one, 1-[[1-[[4-[6-[[2-(acetylamino)-2-deoxy-D-glucopyranosyl]oxy]-3-phenyl-2-quinoxaliny]phenyl]methyl]-4-piperidinyl]-1,3-dihydro-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

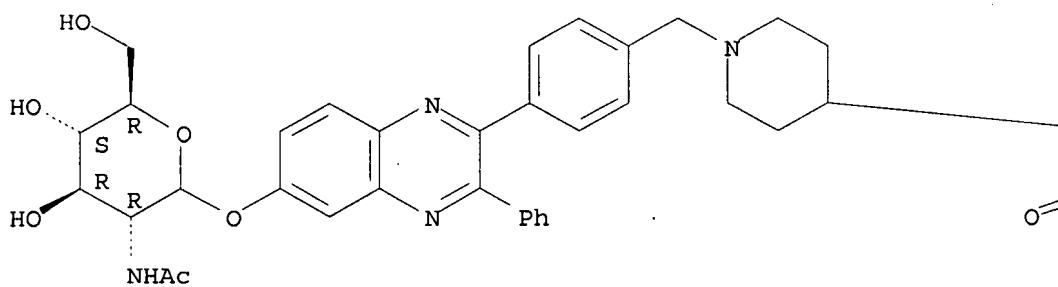
CM 1

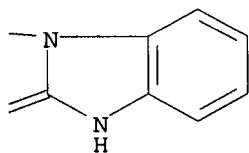
CRN 612848-62-1

CMF C41 H42 N6 O7

Absolute stereochemistry.

PAGE 1-A

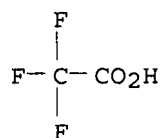




CM 2

CRN 76-05-1

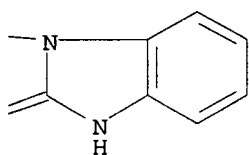
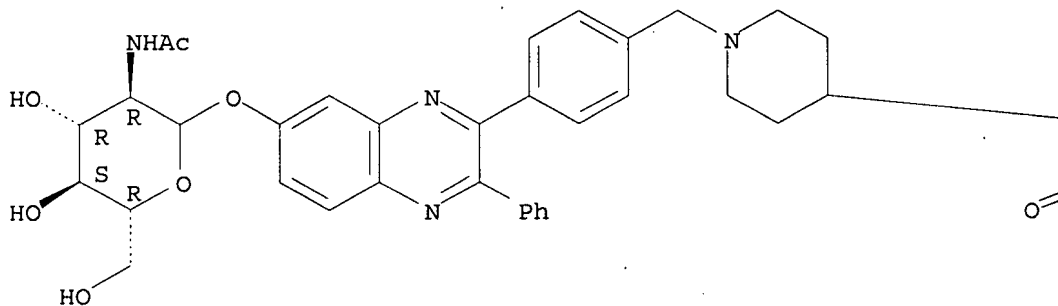
CMF C2 H F3 O2



RN 612848-64-3 CAPLUS

CN 2H-Benzimidazol-2-one, 1-[1-[[4-[7-[[2-(acetylamino)-2-deoxy-D-glucopyranosyl]oxy]-3-phenyl-2-quinoxaliny]phenyl]methyl]-4-piperidiny]-1,3-dihydro- (CA INDEX NAME)

Absolute stereochemistry.



RN 612848-65-4 CAPLUS

CN 2H-Benzimidazol-2-one, 1-[1-[[4-[7-[[2-(acetylamino)-2-déoxy-D-glucopyranosyl]oxy]-3-phenyl-2-quinoxaliny]]phenyl]methyl]-4-piperidiny]]-1,3-dihydro-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

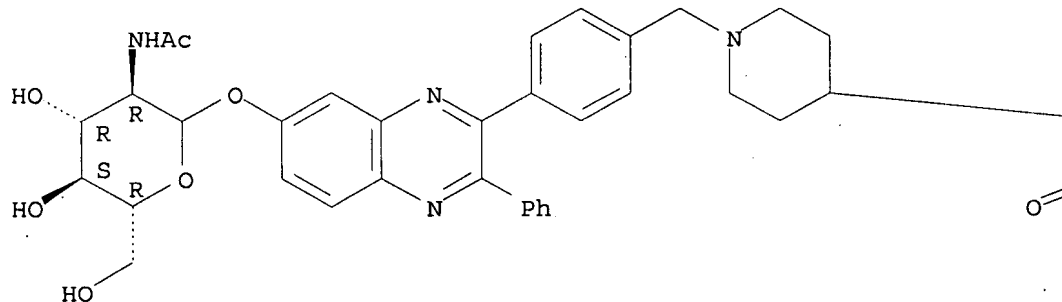
CM 1

CRN 612848-64-3

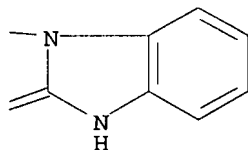
CMF C41 H42 N6 O7

Absolute stereochemistry.

PAGE 1-A



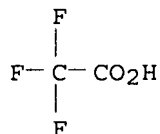
PAGE 1-B



CM 2

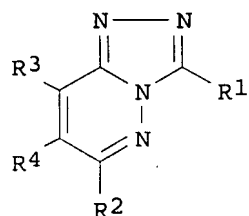
CRN 76-05-1

CMF C2 H F3 O2

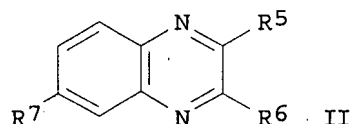


RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 10 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation of triazolo[4,3-b]pyridazines and 2,3-diarylquinazolines for
the treatment of cancer
GI



I



II

AB Triazolo[4,3-b]pyridazines I [R1 = (un)substituted Ph, furyl, thienyl, pyridinyl; R2 = substituted NH2, OH; R3 = H, R4 = (un)substituted cycloalkyl, aryl; R3R4 = (un)substituted CH:CHCH:CH] and quinazolines II [R5, R6 = (un)substituted Ph; R7 = H, alkyl, halogen, OH, alkoxy] were prepared for use as inhibitors of one or two of the isoforms of Akt, a serine/threonine protein kinase, acting particularly on the pleckstrin homol. domain of Akt. Thus, 3,6-dichloropyridazine was converted to its 4-cyclobutyl derivative which was cyclized with BzNHNH2 and aminated to give I [R1 = Ph, R2 = NHCH2CMe2CH2NMe2, R3 = H, R4 = cyclobutyl]. This compound had IC50 for inhibition of Akt1 of 1.4 μ M.

AN 2003:818232 CAPLUS <<LOGINID::20071128>>

DN 139:323527

TI Preparation of triazolo[4,3-b]pyridazines and 2,3-diarylquinazolines for the treatment of cancer

IN Barnett, Stanley F.; Defeo-Jones, Deborah; Haskell, Kathleen M.; Huber, Hans E.; Nahas, Deborah D.; Lindsley, Craig W.; Zhao, Zhijian; Hartman, George D.

PA Merck & Co., Inc., USA

SO PCT Int. Appl., 170 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003084473	A2	20031016	WO 2003-US10632	20030404 <--
	WO 2003084473	A3	20040212		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU	2003226301	A1	20031020	AU 2003-226301	20030404 <--
US	2006142178	A1	20060629	US 2004-510068	20041004 <--

PRAI	US 2002-370827P	P	20020408	<--
	US 2002-417202P	P	20021009	<--
	WO 2003-US10632	W	20030404	

IT 612848-63-2P 612848-65-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of triazolo[4,3-b]pyridazines and 2,3-diarylquinazolines for the treatment of cancer)

RN 612848-63-2 CAPLUS

CN 2H-Benzimidazol-2-one, 1-[1-[[4-[6-[[2-(acetylamino)-2-deoxy-D-glucopyranosyl]oxy]-3-phenyl-2-quinoxaliny]]phenyl]methyl]-4-piperidinyl]-

1,3-dihydro-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

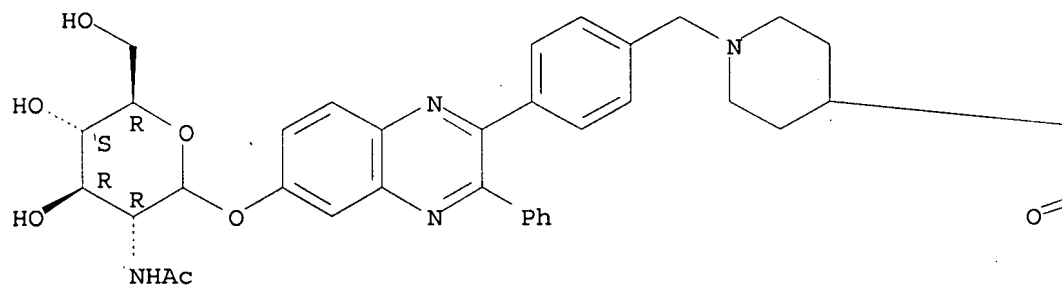
CM 1

CRN 612848-62-1

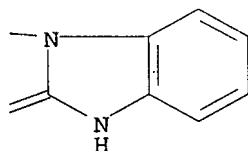
CMF C41 H42 N6 O7

Absolute stereochemistry.

PAGE 1-A



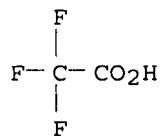
PAGE 1-B



CM 2

CRN 76-05-1

CMF C2 H F3 O2



RN 612848-65-4 CAPLUS

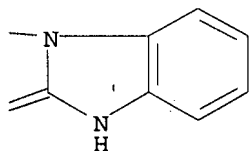
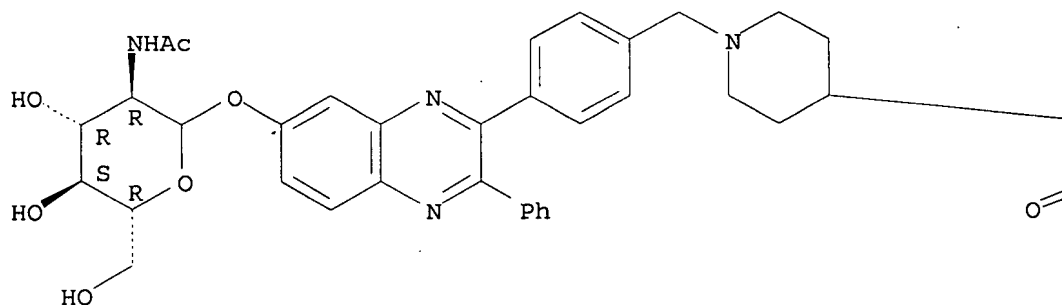
CN 2H-Benzimidazol-2-one, 1-[1-[[4-[7-[[2-(acetylamino)-2-deoxy-D-glucopyranosyl]oxy]-3-phenyl-2-quinoxaliny]]phenyl]methyl]-4-piperidinyl]-1,3-dihydro-, trifluoroacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 612848-64-3

CMF C41 H42 N6 O7

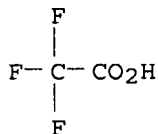
Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



- L38 ANSWER 11 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
- TI Screening, identification and pharmacological use of modulators of polypeptide GalNAc-transferases and sequences of human GalNAc-transferase isoforms
- AB Attachment of O-glycans to proteins is controlled by a large family of homologous polypeptide GalNAc-transferases. Polypeptide GalNAc-transferases contain a C-terminal sequence with similarity to lectins. This invention discloses that the putative lectin domains of GalNAc-transferase isoforms, GalNAc-T4, -T7, -T2, and -T3, are functional and recognize carbohydrates, glycopeptides, and peptides and discloses the lectin domains of GalNAc-T1-T16. These lectin domains have different binding specificities and modulate the functions of GalNAc-transferase isoforms differently. Cloning, expression, and purification of human GalNAc-transferase isoforms -T12, -T13, -T14, -T15, and -T16 is described. Novel methods for identification of inhibitors or modulators of binding activities mediated by lectin domains of polypeptide GalNAc-transferases are disclosed. Direct binding activity of GalNAc-transferase lectins has been demonstrated for the first time and methods to measure lectin mediated binding of isolated lectins or enzymes with lectin domains are

disclosed. The present invention specifically discloses a novel selective inhibitor of polypeptide GalNAc-transferase lectin domains, which provides a major advancement in that this inhibitor and related inhibitors sharing common characteristics of activity bind lectin domains without serving as acceptor substrate for glycosyltransferases involved in synthesis of O-glycans. This inhibitor is represented by the β -anomeric configuration of GalNAc-benzyl, GalNAc β -benzyl. Methods for inhibiting intracellular transport, cell surface expression; and secretion of mucins and O-glycosylated glycoproteins without affecting O-glycosylation processing are disclosed using the novel selective inhibitor identified.

AN 2003:777361 CAPLUS <<LOGINID::20071128>>

DN 139:288179

TI Screening, identification and pharmacological use of modulators of polypeptide GalNAc-transferases and sequences of human GalNAc-transferase isoforms

IN Clausen, Henrik; Bennett, Eric Paul; Hassan, Helle; Reis, Celso Albuquerque

PA Glycozym ApS, Den.

SO U.S. Pat. Appl. Publ., 65 pp., Cont.-in-part of WO 2001 85,215.
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 2

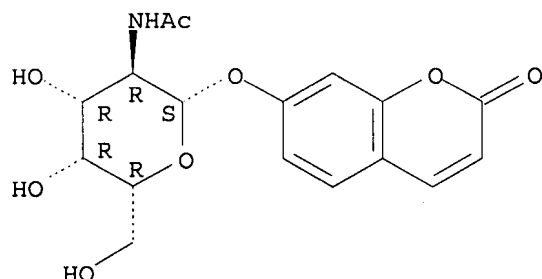
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003186850	A1	20031002	US 2002-292896	20021112 <--
	WO 2001085215	A2	20011115	WO 2001-DK328	20010510 <--
	WO 2001085215	A3	20020627		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	WO 2004042075	A2	20040521	WO 2003-DK763	20031107 <--
	WO 2004042075	A3	20040910		
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW:				
	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003275952	A1	20040607	AU 2003-275952	20031107 <--
	EP 1558728	A2	20050803	EP 2003-810380	20031107 <--
	EP 1558728	B1	20070627		
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	AT 365794	T	20070715	AT 2003-810380	20031107 <--
	US 2005026266	A1	20050203	US 2003-705401	20031110 <--
PRAI	US 2000-203331P	P	20000511	<--	
	WO 2001-DK328	A2	20010510	<--	
	US 2002-425204P	P	20021108	<--	
	WO 2003-DK763	W	20031107		
IT	607743-66-8				
	RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)				

(GalNAc-transferase inhibitor; screening, identification and pharmacol. use of modulators of polypeptide GalNAc-transferases and sequences of human GalNAc-transferase isoforms)

RN 607743-66-8 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[[2-(acetylamino)-2-deoxy- β -D-galactopyranosyl]oxy]- (CA INDEX NAME)

Absolute stereochemistry.



L38 ANSWER 12 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Stable O-(N-acetylglucosaminyl)-linked opioid peptide derivatives showing blood-brain barrier permeability

AB The title derivs. are H-Tyr-D-Ser-Gly-Phe-Leu-Thr-OH to which N-acetylglucosamine is linked to OH group of Tyr1, D-Ser2, and/or Thr6 via glycoside linkage. The glycosyl derivs. are expected to be stable to heat, pH, and enzymic digestion. Solid-phase synthesis of the derivative having N-acetylglucosamine residue at OH group of Tyr1 was shown.

AN 2003:752761 CAPLUS <<LOGINID::20071128>>

DN 139:261567

TI Stable O-(N-acetylglucosaminyl)-linked opioid peptide derivatives showing blood-brain barrier permeability

IN Mizuno, Masamori; Inazu, Toshiyuki

PA Noguchi Research Institute, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003267996	A	20030925	JP 2002-70267	20020314 <--
PRAI	JP 2002-70267		20020314	<--	
IT	601471-42-5				

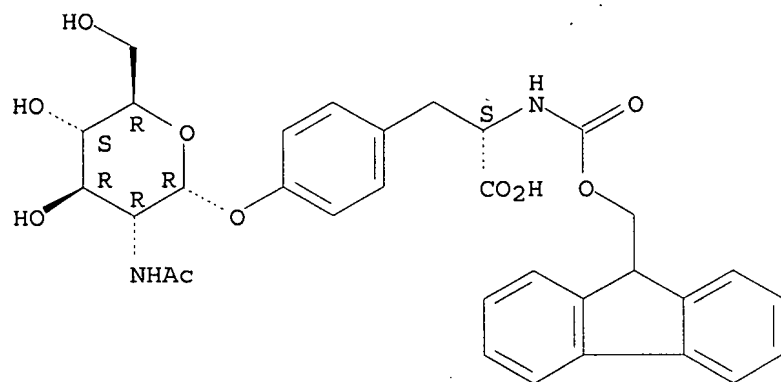
RL: RCT (Reactant); RACT (Reactant or reagent)

(peptide coupling reaction with polymer-bound pentapeptide; preparation of stable O-(N-acetylglucosaminyl)-linked opioid peptide derivs. showing blood-brain barrier permeability)

RN 601471-42-5 CAPLUS

CN L-Tyrosine, O-[2-(acetylamino)-2-deoxy- α -D-glucopyranosyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.



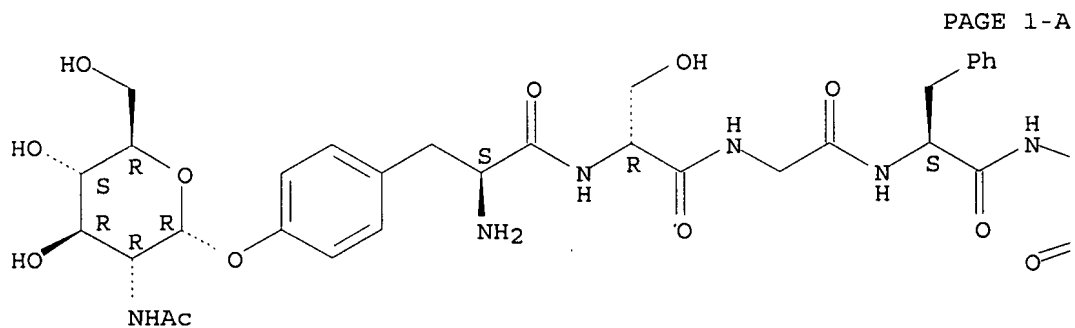
IT 604004-74-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of stable O-(N-acetylglucosaminyl)-linked opioid peptide
 derivs. showing blood-brain barrier permeability)

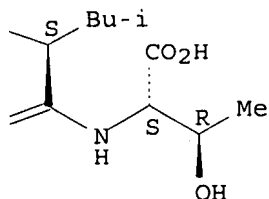
RN 604004-74-2 CAPLUS

CN L-Threonine, O-[2-(acetilamino)-2-deoxy- α -D-glucopyranosyl]-L-tyrosyl-D-serylglycyl-L-phenylalanyl-L-leucyl- (9CI) (CA INDEX NAME)

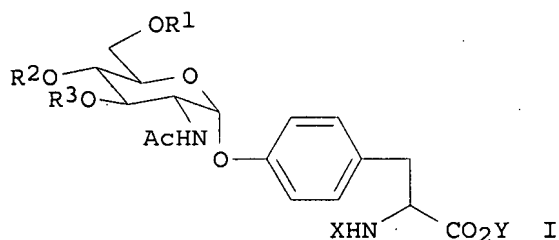
Absolute stereochemistry.



PAGE 1-B



L38 ANSWER 13 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Preparation of N-acetylglucosaminyltyrosine derivatives
 GI



AB The derivs. I (X = amino-protecting group, H; Y = carboxyl-protecting group, H; R1-R3 = OH-protecting group, monosaccharide, oligosaccharide, oligosaccharide, H), useful as materials for synthesis of glycopeptides, are prepared Ytterbium(III) trifluoromethanesulfonate, 2-acetamido-3,4,6-tri-O-benzyl-2-deoxy-D-glucopyranosyl acetate, and N-Benzylloxycarbonyl-L-tyrosine benzyl ester were dissolved in CH₂Cl₂ and the solution was treated with BF₃-Et₂O complex at room temperature for 19 h to give 60% I (X = CO₂CH₂Ph, Y - R1 = R2 = R3 = CH₂Ph).

AN 2003:750712 CAPLUS <<LOGINID::20071128>>

DN 139:261507

TI Preparation of N-acetylglucosaminyltyrosine derivatives

IN Mizuno, Masamori; Inazu, Toshiyuki; Yamanoi, Takashi

PA Noguchi Research Institute, Japan

SO Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

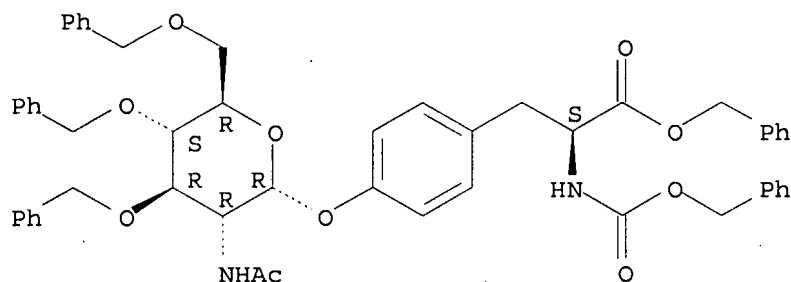
DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003267988	A	20030925	JP 2002-69679	20020314 <--
PRAI	JP 2002-69679		20020314	<--	
OS	MARPAT 139:261507				
IT	601471-40-3P 601471-41-4P 601471-42-5P				
	RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)				
	(preparation of N-acetylglucosaminyltyrosine derivs. as materials for glycopeptides)				
RN	601471-40-3	CAPLUS			
CN	L-Tyrosine, O-[2-(acetylamino)-2-deoxy-3,4,6-tris-O-(phenylmethyl)-α-D-glucopyranosyl]-N-[(phenylmethoxy)carbonyl]-, phenylmethyl ester (CA INDEX NAME)				

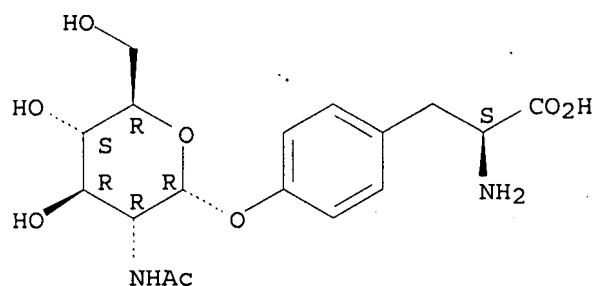
Absolute stereochemistry.



RN 601471-41-4 CAPLUS

CN L-Tyrosine, O-[2-(acetylamino)-2-deoxy-α-D-glucopyranosyl]- (CA INDEX NAME)

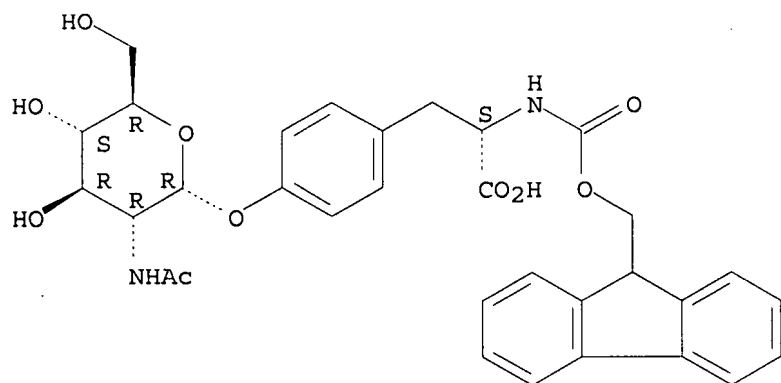
Absolute stereochemistry.



RN 601471-42-5 CAPLUS

CN L-Tyrosine, O-[2-(acetylamino)-2-deoxy-α-D-glucopyranosyl]-N-[(9H-fluoren-9-ylmethoxy)carbonyl]- (CA INDEX NAME)

Absolute stereochemistry.



L38 ANSWER 14 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Skin-lightening cosmetics containing naphthol glycosides

AB This invention relates to irritation-free skin-lightening cosmetics comprising naphthol glycosides and optional other actives, such as ascorbic acid, kojic acid, and ellagic acid to inhibit activities of tyrosinase and to inhibit melanin production For example, a lotion contained 6-hydroxy-2-naphthalenyl-β-D-glucopyranoside 0.3, 1,3-butylene glycol 6, glycerin 4, oleyl alc. 0.1, polyoxyethylene sorbitan monolaurate 0.5, polyoxyethylene lauryl ether 0.5, ethanol 10, and distilled water 78.6 %.

AN 2003:671102 CAPLUS <<LOGINID::20071128>>

DN 139:202116

TI Skin-lightening cosmetics containing naphthol glycosides

IN Sakuma, Katsuya; Yokoe, Ichiro

PA Ogawa and Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

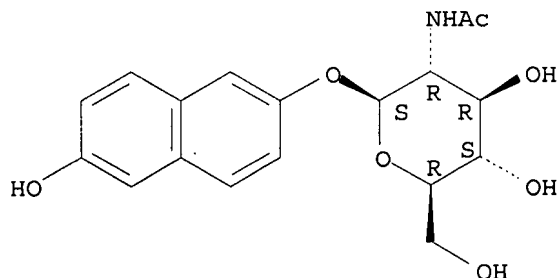
LA Japanese

FAN.CNT 1

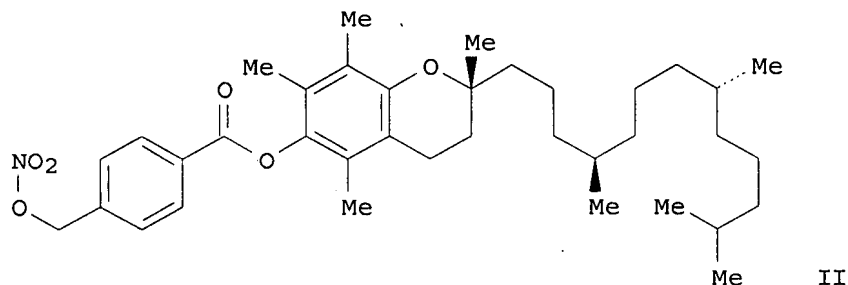
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2003238585	A	20030827	JP 2002-32853	20020208 <--
PRAI	JP 2002-32853		20020208	<--	
OS	MARPAT 139:202116				

IT 585540-59-6
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (skin-lightening cosmetics containing naphthol glycosides and other
 actives)
 RN 585540-59-6 CAPLUS
 CN β -D-Glucopyranoside, 6-hydroxy-2-naphthalenyl 2-(acetylamino)-2-deoxy-
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L38 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Preparation of nitrate prodrugs able to release nitric oxide in a
 controlled and selective way and their use for prevention and treatment of
 inflammatory, ischemic and proliferative diseases
 GI



AB New pharmaceutical compds. of general formula F-(X)_q (I) [q = 1-5,
 preferably 1; F is chosen among drugs such as δ -tocopherol,
 clidanac, diethylhomospermine, glucosamine, thymocartin, vofopitant, etc.;
 X is chosen among 4 groups M, T, V, and Y where M = ONO₂, nitrate salt,
 nitrite ester, ONO, thioinitrite, SNO, etc., T = OR₁-M, OR₁OR₁-M,
 SR₁NR₂R₁-M, NR₂R₁-M, NR₂R₁SR₁-M, etc., R₁ = saturated or unsatd., linear or
 branched alkylene, having 1 to 21 carbon atoms or a saturated or unsatd.,
 optionally heterosubstituted or branched cycloalkylene, having 3 to 7
 carbon atoms or an optionally heterosubstituted arylene having 3 to 7
 carbon atoms; R₂ = H, saturated or unsatd., linear or branched 1-21 carbon
 atom alkyl, saturated or unsatd. optionally heterosubstituted or branched 3-7
 carbon cycloalkyl, optionally heterosubstituted 3-7 carbon aryl; R₁, R₂ =
 OH, SH, F, Cl, Br, OPO₃H₂, CO₂H, etc.; bond between F and T = carboxylic
 ester, carboxylic amide, glycoside, azo, thioester, sulfonic ester, etc.;
 V = Z-M₂, OZ-M₂, NR₂Z-M₂, R₁Z-M₂, OR₁-M₂, OR₁Z-M₂, M₂ = M, R₁-M, OR₁-M,
 SR₁-M, NR₂R₁-M; ZM₂ = COCH₂CH(M₂)CH₂N⁺Me₃, COCH₂CH₂COM₂, COCH(NHR₂)CH₂M₂,
 etc.; Y = 4-COC₆H₄CH₂ONO₂, O(CH₂)₄ONO₂, COCH(NH₂)CH₂ONO₂, 3-OC₆H₄CH₂ONO₂,

etc.] were prepared For example, α -tocopherol reacted with 4-HO₂CC₆H₄CH₂ONO₂ to give the nitroxymethyl derivative II. The compds. of general formula I are nitrate prodrugs which can release nitric oxide in vivo in a controlled and selective way and without hypotensive side effects and for this reason they are useful for the preparation of medicines for prevention and treatment of inflammatory, ischemic, degenerative and proliferative diseases of musculoskeletal, tegumental, respiratory, gastrointestinal, genito-urinary and central nervous systems.

AN 2003:652131 CAPLUS <<LOGINID::20071128>>

DN 139:214237

TI Preparation of nitrate prodrugs able to release nitric oxide in a controlled and selective way and their use for prevention and treatment of inflammatory, ischemic and proliferative diseases

IN Scaramuzzino, Giovanni

PA Italy

SO Eur. Pat. Appl., 313 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1336602	A1	20030820	EP 2002-425075	20020213 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRAI EP 2002-425075 20020213 <--

IT 586348-09-6P 586350-39-2P 586350-62-1P

586350-73-4P 586350-99-4P

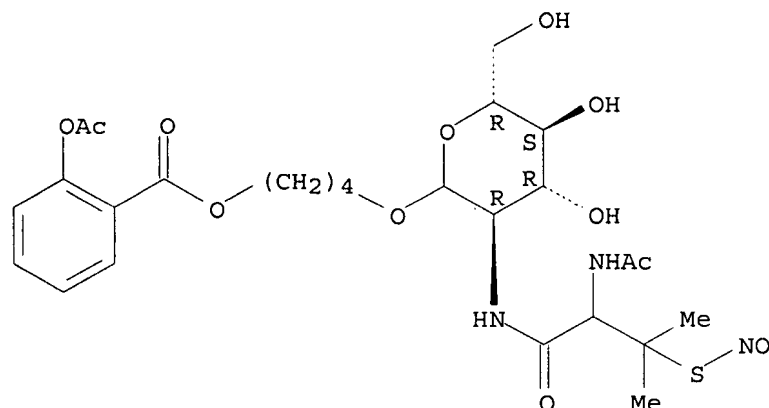
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of nitrate prodrugs for treating or preventing inflammatory, ischemic, degenerative, and proliferative diseases)

RN 586348-09-6 CAPLUS

CN D-Glucopyranoside, 4-[[2-(acetyloxy)benzoyl]oxy]butyl 2-[[2-(acetylamino)-3-methyl-3-(nitrosothio)-1-oxobutyl]amino]-2-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

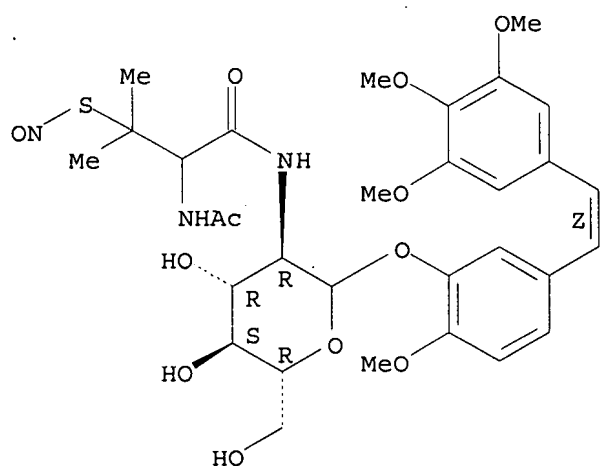


RN 586350-39-2 CAPLUS

CN D-Glucopyranoside, 2-methoxy-5-[(1Z)-2-(3,4,5-trimethoxyphenyl)ethenyl]phenyl 2-[[2-(acetylamino)-3-methyl-3-(nitrosothio)-1-oxobutyl]amino]-2-deoxy- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

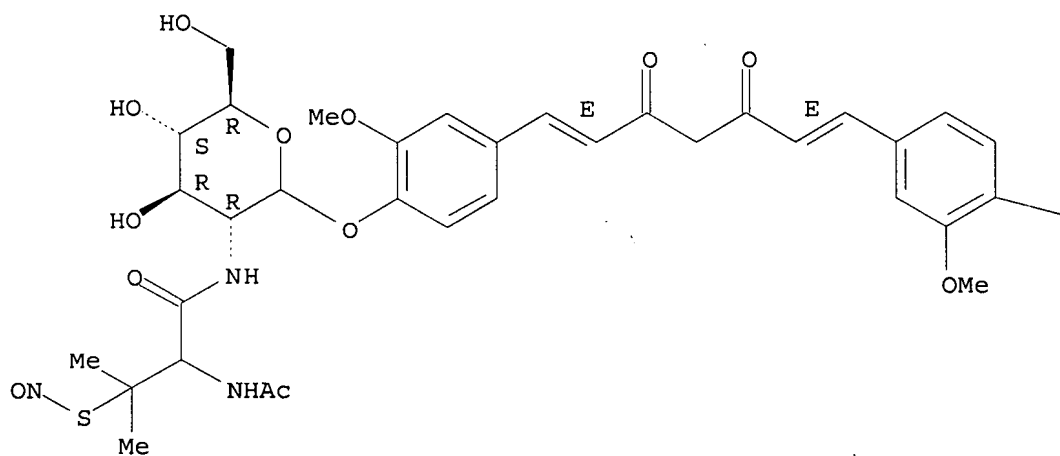


RN 586350-62-1 CAPLUS

CN 1,6-Heptadiene-3,5-dione, 1-[4-[[2-[[2-(acetamino)-3-methyl-3-(nitrosothio)-1-oxobutyl]amino]-2-deoxy-D-glucopyranosyl]oxy]-3-methoxyphenyl]-7-(4-hydroxy-3-methoxyphenyl)-, (1E,6E)- (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



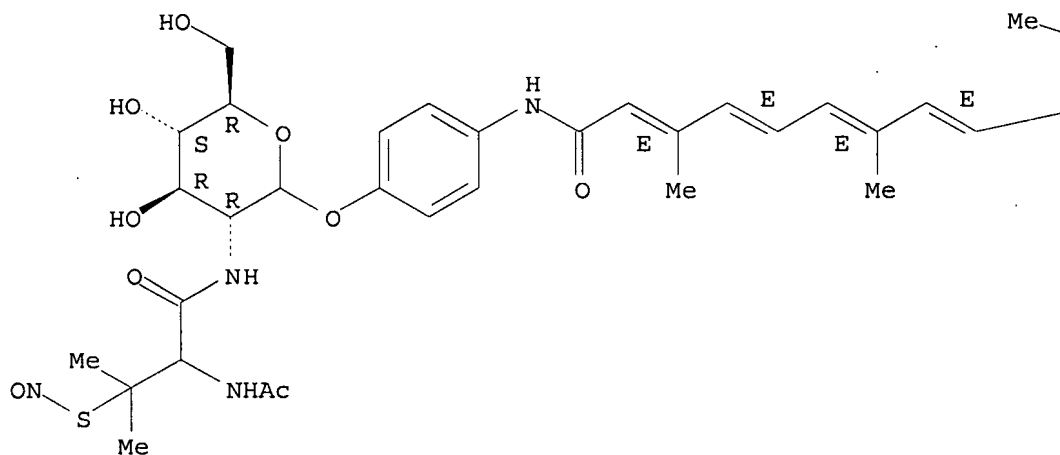
PAGE 1-B

—OH

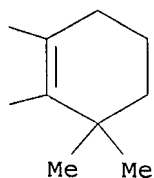
RN 586350-73-4 CAPLUS
 CN Retinamide, N-[4-[[2-[[2-(acetylamino)-3-methyl-3-(nitrosothio)-1-oxobutyl]amino]-2-deoxy-D-glucopyranosyl]oxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry as shown.

PAGE 1-A

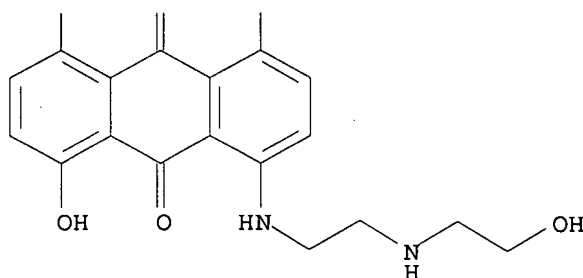
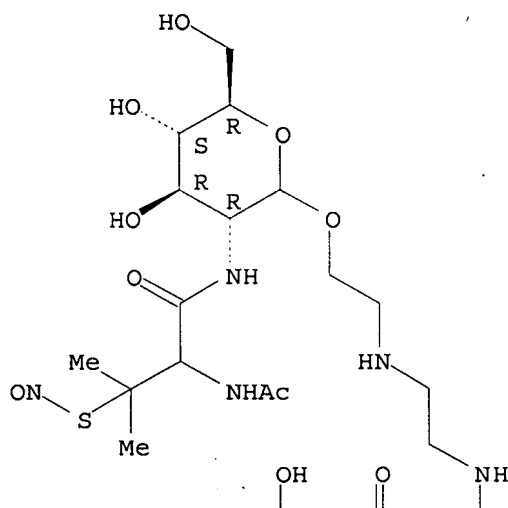


PAGE 1-B



RN 586350-99-4 CAPLUS
 CN 9,10-Anthracenedione, 1-[[2-[[2-[[2-[[2-(acetylamino)-3-methyl-3-(nitrosothio)-1-oxobutyl]amino]-2-deoxy-D-glucopyranosyl]oxy]ethyl]amino]ethyl]amino]-5,8-dihydroxy-4-[[2-[(2-hydroxyethyl)amino]ethyl]amino]- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 16 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Preparation of fluorinated glucosamine analogs that inhibit cell migration and inflammation

AB The invention features methods of inhibiting cell migration, cell proliferation or cell differentiation by contacting a cell with a fluorinated N-acetylglucosamine (F-GlcNAc), e.g., 2-acetamido-2-deoxy-1,3,6-tri-O-acetyl-4-deoxy-4-fluoro-D-glucopyranose or 2-acetamido-2-deoxy-1,4,6-tri-O-acetyl-3-deoxy-3-fluoro-D-glucopyranose. Also provide by the invention is a method of decreasing an amount of HECA-452 epitope on a glycoprotein, e.g., PSGL-1 or CD44 on a cell, by contacting the cell with a fluorinated N-acetylglucosamine. In another aspect the invention features a method of inhibiting inflammation in a tissue, e.g., dermal tissue of a subject by administering to the subject a fluorinated N-acetylglucosamine. The invention also provides an improved method for preparing fluorinated N-acetylglucosamine.

AN 2003:610069 CAPLUS <<LOGINID::20071128>>

DN 139:143939
 TI Preparation of fluorinated glucosamine analogs that inhibit cell migration and inflammation
 IN Sackstein, Robert; Dimitroff, Charles J.; Bernacki, Ralph J.; Sharma, Moheswar; Matta, Khushi L.; Paul, Brajeswar
 PA USA
 SO U.S. Pat. Appl. Publ., 37 pp.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003148997	A1	20030807	US 2002-305812	20021126 <--
	US 7098195	B2	20060829		
	CA 2471988	A1	20031113	CA 2002-2471988	20021127 <--
	WO 2003093410	A2	20031113	WO 2002-US38003	20021127 <--
	WO 2003093410	A3	20040212		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002367811	A1	20031117	AU 2002-367811	20021127 <--
EP 1461046	A2	20040929	EP 2002-807364	20021127 <--

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

JP 2005532310	T	20051027	JP 2004-501546	20021127 <--
US 2006281708	A1	20061214	US 2006-508566	20060823 <--

PRAI US 2001-334151P	P	20011128	<--
US 2002-305812	A	20021126	<--
WO 2002-US38003	W	20021127	<--

IT 572909-54-7P 572909-55-8P

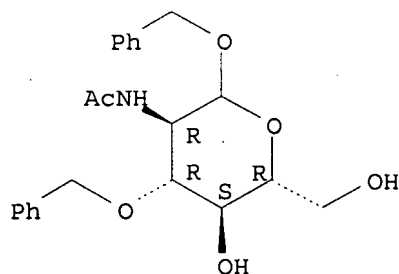
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of fluorinated glucosamine analogs that inhibit cell migration, cell proliferation, and inflammation)

RN 572909-54-7 CAPLUS

CN D-Glucopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-3-O-(phenylmethyl)- (CA INDEX NAME)

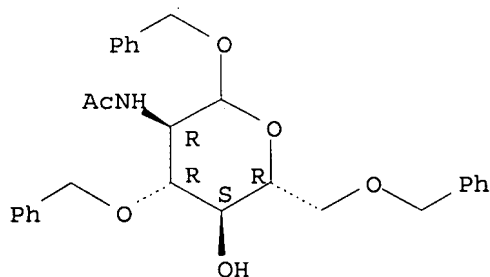
Absolute stereochemistry.



RN 572909-55-8 CAPLUS

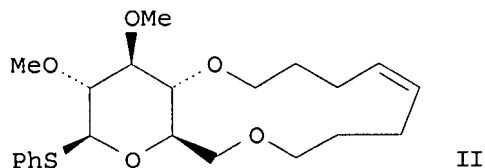
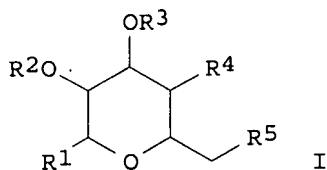
CN D-Glucopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-3,6-bis-O-(phenylmethyl)- (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 17 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
TI Preparation and use of glycoside-based ring structures with antimicrobial
and cytostatic activity
GI



AB Novel glycoside-based compds. I, wherein R1 is H, SPh, Ph, PhS, All, Bn; R2 is H, Et, All, Me, Bn; R3 is H, Et, Me, All, Bn; R4 and R5 form a ring and are -carbamate-C6-alkyl-ether-C4-alkenyl-ether-, -ester-C6-alkenyl-ester-, -ester-C6-alkyl-ester-, -ether-C8-alkenyl-ether-, -ester-C6-alkenyl-amide-, -ether-C7-alkenyl-amide-, -ester-C10-alkenyl-ester-, -ester-C18-alkenyl-ester-, -OCH(Ph)CH2O-, with an attached ring system that have antimicrobial or cytostatic activity. The compds. are administered to humans and animals for the treatment or amelioration of bacterial, fungal, viral, or protozoal infections or tumors. Thus, glycoside II was prepared and tested in humans for its antimicrobial and cytostatic activities.

AN 2003:319645 CAPLUS <<LOGINID::20071128>>
DN 138:321501

TI Preparation and use of glycoside-based ring structures with antimicrobial
and cytostatic activity
IN Sas, Benedikt; Van Der Eycken, Johan; Van Hemel, Johan; Blom, Petra;
Vandenkerckhove, Jan; Ruttens, Bart
PA Kemin Pharma Europe, USA

SO PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003032905	A2	20030424	WO 2002-US32817	20021015 <--
	WO 2003032905	A3	20040129		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2003158243	A1	20030821	US 2001-977478	20011015 <--
	US 7138531	B2	20061121		
	CA 2463084	A1	20030424	CA 2002-2463084	20021015 <--
	AU 2002335813	A1	20030428	AU 2002-335813	20021015 <--
	EP 1446391	A2	20040818	EP 2002-770578	20021015 <--
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK			
	JP 2005509615	T	20050414	JP 2003-535711	20021015 <--
	US 2004224904	A1	20041111	US 2004-861768	20040604 <--
PRAI	US 2001-977478	A	20011015	<--	
	WO 2002-US32817	W	20021015	<--	

OS MARPAT 138:321501

IT 511274-66-1P

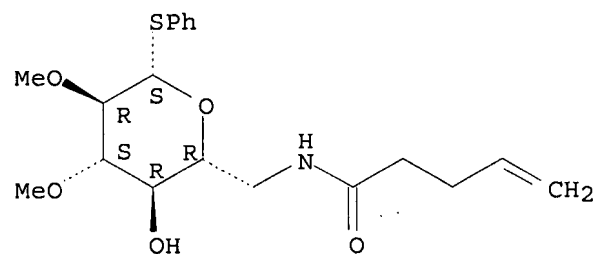
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and use of glycoside-based ring structures with antimicrobial and cytostatic activity)

RN 511274-66-1 CAPLUS

CN β -D-Glucopyranoside, phenyl 6-deoxy-2,3-di-O-methyl-6-[(1-oxo-4-pentenyl)amino]-1-thio- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L38 ANSWER 18 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Plating media for the presumptive identification of the genus *Shigella* and the species *Shigella sonnei* and *Shigella boydii* utilizing a chromogenic substrate of α -galactosidase

AB The invention relates to a solid growth plating medium in which *Shigella* organisms will grow and form colonies in the medium, and substantially, other microorganisms are inhibited or their colonies are differentiated from *Shigella* organisms. In one embodiment of the invention, colonies produced by *Shigella* appear with the color of the plating medium, usually

a clear off-white color, that can be readily observed In another embodiment, the fact that *Shigella boydii* and *Shigella sonnei* produce the enzyme α -galactosidase, but most *Shigella dysenteriae* and *Shigella flexneri* strains do not, is utilized with a chromogenic substrate to produce colonies of these microorganisms of a distinguishing color.

AN 2003:203309 CAPLUS <<LOGINID::20071128>>

DN 138:234463

TI Plating media for the presumptive identification of the genus *Shigella* and the species *Shigella sonnei* and *Shigella boydii* utilizing a chromogenic substrate of α -galactosidase

IN Restaino, Lawrence

PA USA

SO U.S. Pat. Appl. Publ., 6 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003049718	A1	20030313	US 2001-934506	20010822 <--
	US 6764832	B2	20040720		
PRAI	US 2001-934506		20010822 <--		
IT	501432-61-7				

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified);

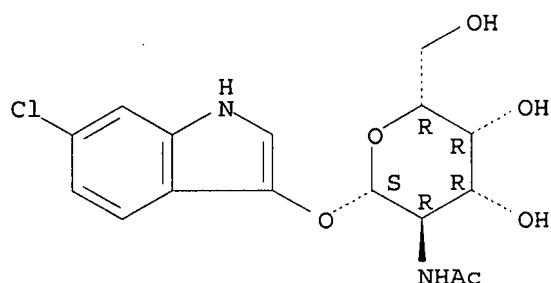
ANST (Analytical study); BIOL (Biological study); USES (Uses)

(chromogenic substrate; plating media for presumptive identification of genus *Shigella* and species *Shigella sonnei* and *Shigella boydii* utilizing chromogenic substrate of α -galactosidase)

RN 501432-61-7 CAPLUS

CN β -D-Galactopyranoside, 6-chloro-1H-indol-3-yl 2-(acetylamino)-2-deoxy-
(CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 19 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

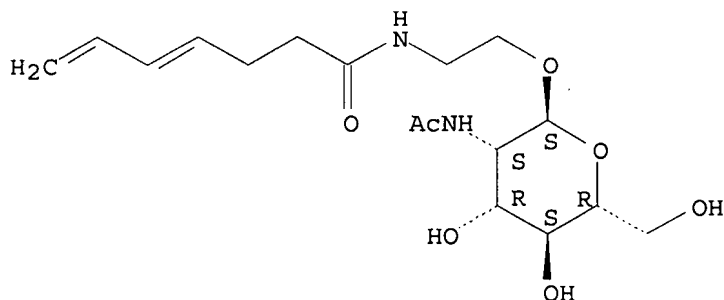
TI Towards a synthetic glycoconjugate vaccine against *Neisseria meningitidis* A

AB Albumin conjugates of synthetic fragments of the capsular polysaccharide of the Gram-neg. bacterium *Neisseria meningitidis* serogroup A were prepared. The fragments include monosaccharides α -D-ManpNAc-(1 \rightarrow O)-(CH₂)₂NH₂ and 6-O-P(O)(O-)-2- α -D-ManpNAc-(1 \rightarrow O)-(CH₂)₂NH₂, disaccharide α -D-ManpNAc-[1 \rightarrow O-P(O)(O-) \rightarrow 6]- α -D-ManpNAc-(1 \rightarrow O)-(CH₂)₂NH₂, and trisaccharide α -D-ManpNAc-[1 \rightarrow O-P(O)(O-) \rightarrow 6]- α -D-ManpNAc-[1 \rightarrow O-P(O)(O-) \rightarrow 6]- α -D-ManpNAc-(1 \rightarrow O)-(CH₂)₂NH₂. Two monosaccharide blocks were employed as key intermediates. The reducing-end mannose unit featured the NHAc group at C-2, and contained the aminoethyl spacer as the aglycon for the final bioconjugation. The inter-residual phosphodiester

linkages were fashioned from an anomERICALLY positioned H-phosphonate group in a 2-azido-mannose building block. The spacer-linked saccharides were N-acylated with hepta-4,6-dienoic acid and the resulting conjugated diene-equipped saccharides were subjected to Diels - Alder-type addition with maleimidobutyryl-group functionalized human serum albumin to form covalent conjugates containing up to 26 saccharide haptens per albumin mol. Complete ^1H , ^{13}C , and ^{31}P NMR assignments are given. Antigenicity of the neoglycoconjugates was demonstrated by a double immunodiffusion assay which indicated that a fragment as small as a monosaccharide is recognized by a polyclonal meningococcus group A antiserum and that the O-acetyl group(s) present in the natural capsular material is not essential for antigenicity.

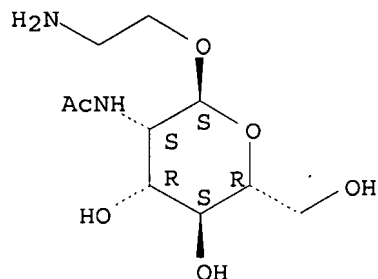
AN 2002:806294 CAPLUS <<LOGINID::20071128>>
 DN 138:170432
 TI Towards a synthetic glycoconjugate vaccine against Neisseria meningitidis A
 AU Berkin, Ali; Coxon, Bruce; Pozsgay, Vince
 CS Laboratory of Developmental and Molecular Immunity, National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, MD, 20892-2720, USA
 SO Chemistry--A European Journal (2002), 8(19), 4424-4433
 CODEN: CEUJED; ISSN: 0947-6539
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 OS CASREACT 138:170432
 IT 497096-35-2DP, human serum albumin bound
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (synthesis and antigenicity of human serum albumin conjugates of synthetic fragments of the capsular polysaccharide of Neisseria meningitidis)
 RN 497096-35-2 CAPLUS
 CN 4,6-Heptadienamide, N-[2-[[2-(acetylamino)-2-deoxy- α -D-mannopyranosyl]oxy]ethyl]- (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



IT 497096-00-1P 497096-20-5P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (synthesis and antigenicity of human serum albumin conjugates of synthetic fragments of the capsular polysaccharide of Neisseria meningitidis)
 RN 497096-00-1 CAPLUS
 CN α -D-Mannopyranoside, 2-aminoethyl 2-(acetylamino)-2-deoxy- (CA INDEX NAME)

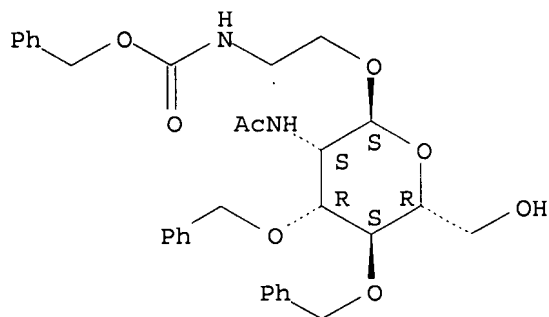
Absolute stereochemistry. Rotation (+).



RN 497096-20-5 CAPLUS

CN Carbamic acid, N-[2-[[2-(acetylamino)-2-deoxy-3,4-bis-O-(phenylmethyl)-
α-D-mannopyranosyl]oxy]ethyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 20 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Intramolecular Hydrogen Abstraction Reaction Promoted by Alkoxy Radicals
in Carbohydrates. Synthesis of Chiral 2,7-Dioxabicyclo[2.2.1]heptane and
6,8-Dioxabicyclo[3.2.1]octane Ring Systems

AB The reaction of specifically protected anhydroalditols with
(diacetoxyiodo)benzene or iodosylbenzene and iodine is a mild and
selective procedure for the synthesis of chiral 6,8-
dioxabicyclo[3.2.1]octane and 2,7-dioxabicyclo[2.2.1]heptane ring systems
under neutral conditions. This reaction can be considered to be an
intramol. glycosidation that goes through an intramol. hydrogen
abstraction promoted by an alkoxy radical followed by oxidation of the
transient C-radical intermediate to an oxycarbenium ion. This methodol.
is useful not only for the preparation of chiral synthons but also for the
selective oxidation of specific carbons of the carbohydrate skeleton,
constituting a good procedure for the synthesis of protected uloses.

AN 2002:782769 CAPLUS <<LOGINID::20071128>>

DN 137:385018

TI Intramolecular Hydrogen Abstraction Reaction Promoted by Alkoxy Radicals
in Carbohydrates. Synthesis of Chiral 2,7-Dioxabicyclo[2.2.1]heptane and
6,8-Dioxabicyclo[3.2.1]octane Ring Systems

AU Francisco, Cosme G.; Herrera, Antonio J.; Suarez, Ernesto

CS Instituto de Productos Naturales y Agrobiologia, C.S.I.C., La Laguna,
Tenerife, 38206, Spain

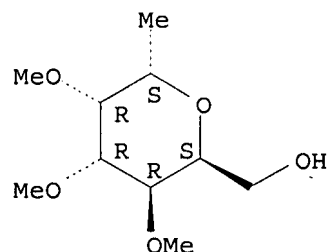
SO Journal of Organic Chemistry (2002), 67(21), 7439-7445
CODEN: JOCEAH; ISSN: 0022-3263

PB American Chemical Society

DT Journal

LA English
 OS CASREACT 137:385018
 IT 476159-36-1P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (intramol. hydrogen abstraction and reaction promoted by alkoxy
 radicals and cyclization in carbohydrates synthesis of chiral
 dioxabicycloheptane and dioxabicyclooctane ring systems)
 RN 476159-36-1 CAPLUS
 CN L-glycero-D-galacto-Heptitol, 2,6-anhydro-1-deoxy-3,4,5-tri-O-methyl- (CA
 INDEX NAME)

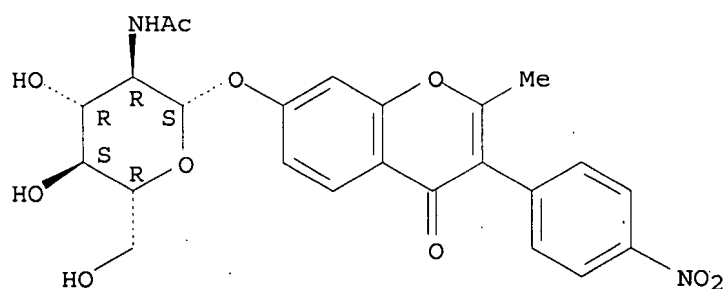
Absolute stereochemistry. Rotation (-).



RE.CNT 72 THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 21 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Synthesis of N-Acetylglucosaminides with Coumarin and Chromone Aglycons
 AB β -O-Glycosides of N-acetylglucosamine with substituted
 7-hydroxychromones and 7-hydroxycoumarins as the aglycons are synthesized.
 The Ph hydroxyls are O-glycosylated in a solid-liquid system with
 crown-ether catalysts. The structures of the chromone and coumarin
 N-acetylglucosaminides and their per-O-acetates are proved by PMR
 spectroscopy.
 AN 2002:598702 CAPLUS <<LOGINID::20071128>>
 DN 138:170423
 TI Synthesis of N-Acetylglucosaminides with Coumarin and Chromone Aglycons
 AU Zemlyakov, A. E.; Kur'yanov, V. O.; Chupakhina, T. A.; Chirva, V. Ya.;
 Ishchenko, V. V.; Garazd, M. M.; Khilya, V. P.
 CS V. I. Vernadskii Tavricheskii National University, Simferopol, 95007,
 Ukraine
 SO Chemistry of Natural Compounds (Translation of Khimiya Prirodnikh
 Soedinenii) (2002), 38(2), 149-153
 CODEN: CHNCA8; ISSN: 0009-3130
 PB Kluwer Academic/Consultants Bureau
 DT Journal
 LA English
 OS CASREACT 138:170423
 IT 496868-65-6P 496868-66-7P 496868-67-8P
 496868-68-9P 496868-69-0P 496868-70-3P
 496868-71-4P 496868-72-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis and mol. structure of N-acetylglucosaminides with coumarin
 and chromone aglycons via crown ether phase transfer catalysis
 glycosidation)
 RN 496868-65-6 CAPLUS
 CN 4H-1-Benzopyran-4-one, 7-[[2-(acetylamino)-2-deoxy- β -D-
 glucopyranosyl]oxy]-2-methyl-3-(4-nitrophenyl)- (CA INDEX NAME)

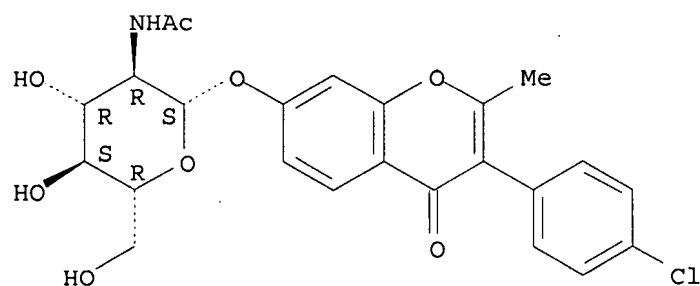
Absolute stereochemistry. Rotation (-).



RN 496868-66-7 CAPLUS

CN 4H-1-Benzopyran-4-one, 7-[[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]oxy]-3-(4-chlorophenyl)-2-methyl- (CA INDEX NAME)

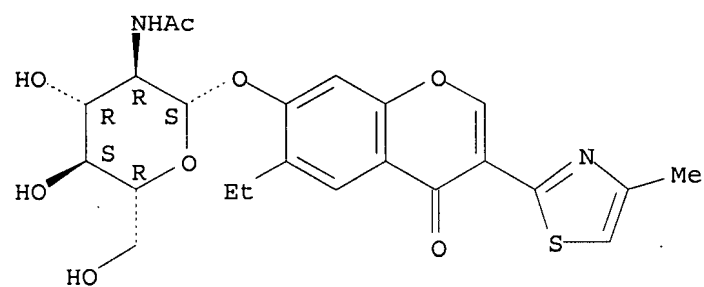
Absolute stereochemistry. Rotation (-).



RN 496868-67-8 CAPLUS

CN 4H-1-Benzopyran-4-one, 7-[[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]oxy]-6-ethyl-3-(4-methyl-2-thiazolyl)- (CA INDEX NAME)

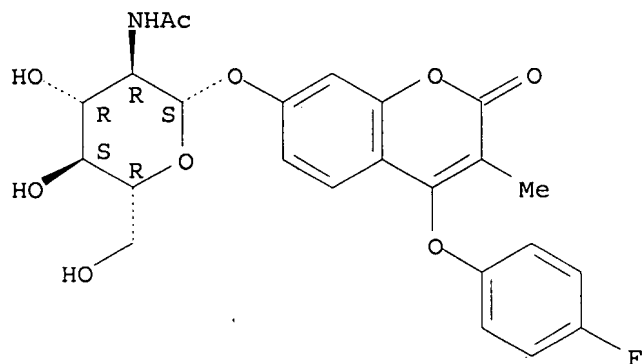
Absolute stereochemistry. Rotation (-).



RN 496868-68-9 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]oxy]-4-(4-fluorophenoxy)-3-methyl- (CA INDEX NAME)

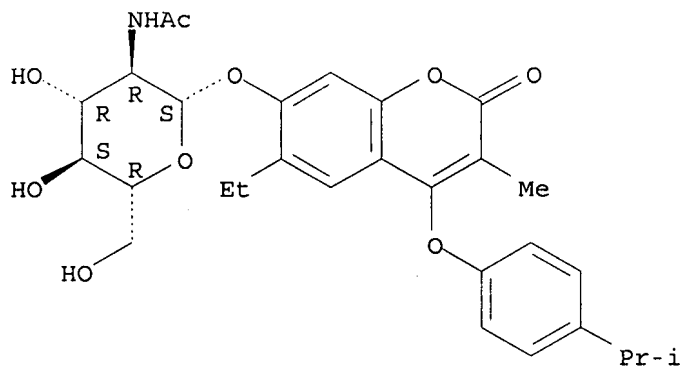
Absolute stereochemistry. Rotation (-).



RN 496868-69-0 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]oxy]-6-ethyl-3-methyl-4-[4-(1-methylethyl)phenoxy]- (CA INDEX NAME)

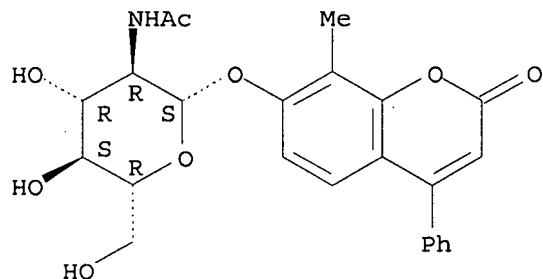
Absolute stereochemistry. Rotation (-).



RN 496868-70-3 CAPLUS

CN 2H-1-Benzopyran-2-one, 7-[[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]oxy]-8-methyl-4-phenyl- (CA INDEX NAME)

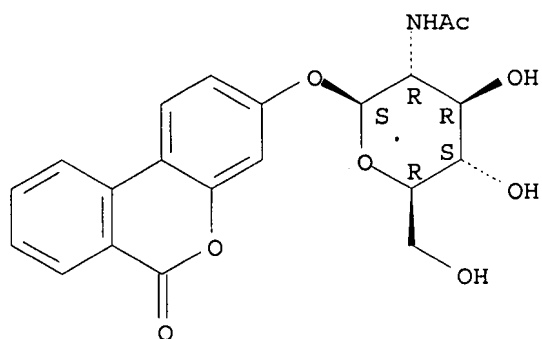
Absolute stereochemistry. Rotation (-).



RN 496868-71-4 CAPLUS

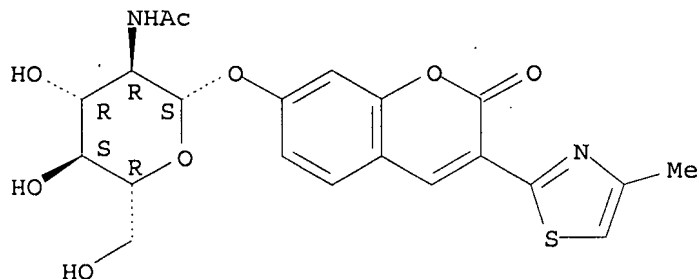
CN 6H-Dibenzo[b,d]pyran-6-one, 3-[[2-(acetylamino)-2-deoxy-β-D-glucopyranosyl]oxy]- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 496868-72-5 CAPLUS
 CN 2H-1-Benzopyran-2-one, 7-[[2-(acetamino)-2-deoxy- β -D-glucopyranosyl]oxy]-3-(4-methyl-2-thiazolyl)- (CA INDEX NAME)

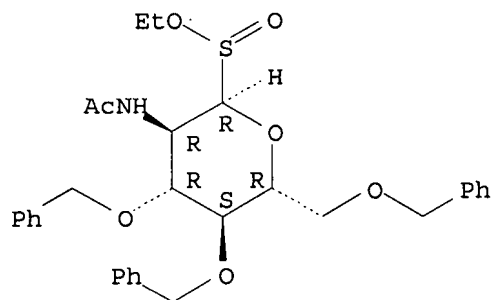
Absolute stereochemistry. Rotation (-).



RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 22 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI The surprise synthesis of α -GlcNAc 1-C-sulfonates
 AB Oxidation of GlcNAc thiazoline in the presence of an alc. affords no glycosidation products, but rather the alkyl α -GlcNAc 1-C-sulfonate. E2 cleavage of the sulfonate ester and then O-deacetylation gives the α -GlcNAc 1-C-sulfonic acid, a new type of carbohydrate derivative
 AN 2002:586166 CAPLUS <<LOGINID::20071128>>
 DN 137:370300
 TI The surprise synthesis of α -GlcNAc 1-C-sulfonates
 AU Knapp, Spencer; Darout, Etzer
 CS Department of Chemistry and Chemical Biology, Rutgers-The State University of New Jersey, Piscataway, NJ, 08854-8087, USA
 SO Tetrahedron Letters (2002), 43(34), 6075-6078
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 137:370300
 IT 475488-80-3P 475488-89-2P 475489-07-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of α -GlcNAc 1-C-sulfonates via oxidation of GlcNAc thiazoline in an alc. media)
 RN 475488-80-3 CAPLUS
 CN α -D-Glucopyranose, 2-(acetamino)-1,2-dideoxy-1-C-(ethoxysulfinyl)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

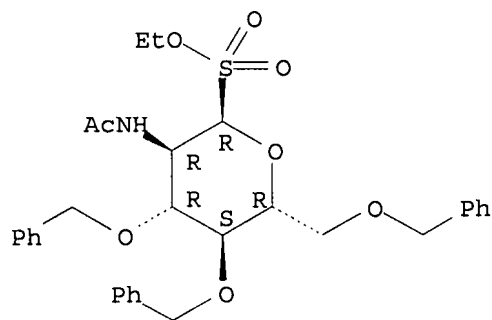
Absolute stereochemistry.



RN 475488-89-2 CAPLUS

CN α-D-Glucopyranose, 2-(acetylamino)-1,2-dideoxy-1-C-(ethoxysulfonyl)-3,4,6-tris-O-(phenylmethyl)- (9CI) (CA INDEX NAME)

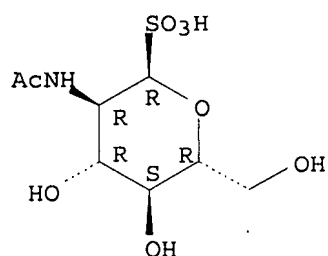
Absolute stereochemistry.



RN 475489-07-7 CAPLUS

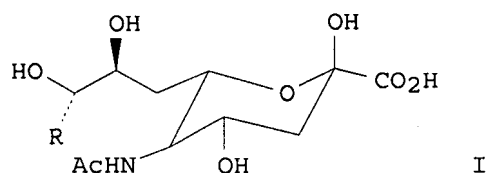
CN α-D-Glucopyranose, 2-(acetylamino)-1,2-dideoxy-1-C-sulfo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L38 ANSWER 23 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
TI Enzymic synthesis of 7-deoxy-N-acetylneuraminic acid and
7-O-methyl-N-acetylneuraminic acid
GI



AB Neuraminic acids I (R = H, OMe) were synthesized through the sialic acid aldolase-catalyzed aldol condensation of 4-deoxy-N-acetyl-D-mannosamine and 4-O-methyl-N-acetyl-D-mannosamine, resp., with pyruvate. The obtained sialic acids will be used as probes for the investigation of the unusual mechanism of a novel sialidase from leech.

AN 1995:301805 CAPLUS <<LOGINID::20071128>>

DN 122:187974

TI Enzymic synthesis of 7-deoxy-N-acetylneuraminic acid and 7-O-methyl-N-acetylneuraminic acid

AU Halcomb, Randall L.; Fitz, Wolfgang; Wong, Chi-Huey

CS Dep. Chem., Scripps Res. Inst., La Jolla, CA, 92037, USA

SO Tetrahedron: Asymmetry (1994), 5(12), 2437-42

CODEN: TASYE3; ISSN: 0957-4166

PB Elsevier

DT Journal

LA English

OS CASREACT 122:187974

IT 848138-22-7P

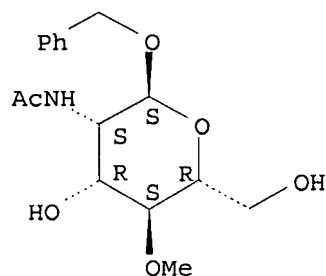
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(synthesis of neuraminic acids and via sialic acid aldolase-catalyzed aldol condensation of mannosamine with pyruvate)

RN 848138-22-7 CAPLUS

CN α -D-Mannopyranoside, phenylmethyl 2-(acetylamino)-2-deoxy-4-O-methyl- (CA INDEX NAME)

Absolute stereochemistry.



L38 ANSWER 24 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI Chemistry of the arterial wall. VII. Purification and properties of β -acetylglucosaminidase from the aorta of cattle

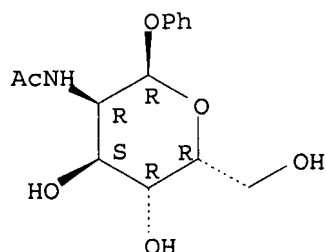
AB cf. CA 56, 5246h. β -Acetylglucosaminidase (exo- β -2-acetamido-2-deoxy-D-glucosidase) (I) was precipitated from exts. of bovine aortas between

10 and 30% $(\text{NH}_4)_2\text{SO}_4$ concns., chromatographed of TEAE-cellulose at pH 8, and followed by chromatography on CM-cellulose at pH 3.9. The final product represented a 600-fold purification of I with a sp. activity of 6.4 I.U./mg. I had an optimum activity at pH 4.4 in citrate buffer, and had a pH-activity curve identical with that of the I from bovine spleen. Albumin (0.01%) and 0.01M KCN activated I 26 and 5%, resp., and together,

they activated I 63%. Natural substrates for I were: hyaluronate, chondroitin 4-sulfate and its protein complex, and chondroitin 6-sulfate. The Michaelis consts. for synthetic substrates were: phenyl- β -N-acetyl-D-glucosamine 4.0, phenyl- β -N-acetyl-D-galactosamine 4.8, and p-nitrophenyl- β -N-acetyl-D-glucosamine 1.8 mM. Heavy metals, cysteine, glutathione, glucuronic acid, and EDTA were noncompetitive inhibitors of I, and acidic glucosaminoglycans and polyanions were competitive inhibitors. I is probably involved in the metabolism of acidic glucosaminoglycans of the arterial wall.

AN 1965:425469 CAPLUS <<LOGINID::20071128>>
 DN 63:25469
 OREF 63:4589c-e
 TI Chemistry of the arterial wall. VII. Purification and properties of β -acetylglucosaminidase from the aorta of cattle
 AU Buddecke, Eckhart; Werries, Eckhard
 CS Univ. Tuebingen, Germany
 SO Hoppe-Seyler's Zeitschrift fuer Physiologische Chemie (1965), 340(3-4), 257-72
 CODEN: HSZPAZ; ISSN: 0018-4888
 DT Journal
 LA German
 IT 886749-15-1, Galactoside, phenyl 2-acetamido-2-deoxy-, β -D- (hydrolysis by β -acetylaminodeoxyglucosidase)
 RN 886749-15-1 CAPLUS
 CN Galactoside, phenyl 2-acetamido-2-deoxy-, β -D- (7CI) (CA INDEX NAME)

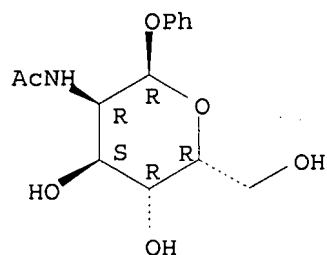
Absolute stereochemistry.



L38 ANSWER 25 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Purification and the properties of a β -N-acetyl-D-hexosaminidase from the bovine spleen
 AB β -N-Acetyl-D-hexosaminidase (I) from bovine spleen was purified by fractionation with $(\text{NH}_4)_2\text{SO}_4$ and column chromatography on triethylaminoethyl cellulose and carboxymethyl cellulose. Sp. activity was increased 20,000-fold. I was active with synthetic substrates, β -phenyl-N-acetylglucosamine, β -(p-nitrophenyl)-N-acetylglucosamine, and β -phenyl-N-acetylgalactosamine and with natural substrates such as chondroitin 4-sulfate and similar materials. Optimum pH for I was from 3.4 to 5.8, and optimum temperature was 37°. Activation of I by CN-, substrate concentration changes, serum albumin, and oligo-N-methylmorpholinium and inhibition by N-acetylglucosamine, acetamide, acetate, chondroitin sulfates, heavy metals (Hg, Fe, Cu, Al, Zn, Ni, Mn, Co), sulfur compds., and carbohydrate-amino acid complexes were investigated.
 AN 1964:485587 CAPLUS <<LOGINID::20071128>>
 DN 61:85587
 OREF 61:14963a-b
 TI Purification and the properties of a β -N-acetyl-D-hexosaminidase from the bovine spleen
 AU Buddecke, E.; Werries, E.
 CS Univ. Tuebingen, Germany

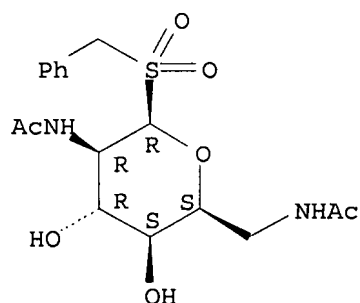
SO Zeitschrift fuer Naturforschung (1964), 19b(9), 798-800
 CODEN: ZNTFA2; ISSN: 0372-9516
 DT Journal
 LA Unavailable
 IT 886749-15-1, Galactoside, phenyl 2-acetamido-2-deoxy-, β -D-
 (hydrolysis by β -acetylaminodeoxyhexosidase of spleen)
 RN 886749-15-1 CAPLUS
 CN Galactoside, phenyl 2-acetamido-2-deoxy-, β -D- (7CI) (CA INDEX NAME)

Absolute stereochemistry.



L38 ANSWER 26 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI The configuration of paromose
 AB The diaminohexose (paromose) in the antibiotic paromomycin is shown to be 2,6-diamino-2,6-dideoxy-L-idose (I). The alkaline degradation of 1,1bis(alkylsulfonyl)hexitol derivs. was extended to 2,6-diacetamido-2,6-dideoxyhexitol derivs. and afforded 5-acetamido-5-deoxy-L-xylofuranose and the isomeric 5-acetamido-5-deoxy-L-xylopyranose. Deamination of Me tetra-O-acetylparomobiosaminide dihydrochloride followed by acid hydrolysis gave L-galactose and D-ribose. The hexose is shown to be derived from the diaminohexosyl moiety by acetate participation followed by inversion at C-2 and C-3.
 AN 1963:469369 CAPLUS <<LOGINID::20071128>>
 DN 59:69369
 OREF 59:12890f-h
 TI The configuration of paromose
 AU Haskell, Theodore H.; Hanessian, Stephen
 CS Parke, Davis & Co., Ann Arbor, MI
 SO Journal of Organic Chemistry (1963), 28(10), 2598-604
 CODEN: JOCEAH; ISSN: 0022-3263
 DT Journal
 LA Unavailable
 IT 887607-42-3P, Idopyranose, 2,6-diacetamido-1-(benzylsulfonyl)-1,2,6-trideoxy-, β -L- 887607-44-5P, Idopyranose, 2,6-diacetamido-1-(benzylsulfonyl)-1,2,6-trideoxy-, α -L-
 RL: PREP (Preparation)
 (preparation of)
 RN 887607-42-3 CAPLUS
 CN Idopyranose, 2,6-diacetamido-1-(benzylsulfonyl)-1,2,6-trideoxy-, β -L- (7CI) (CA INDEX NAME)

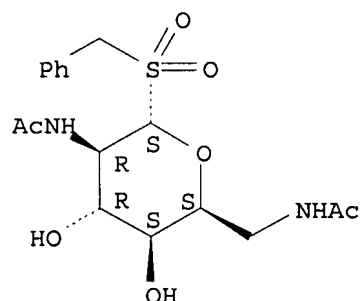
Absolute stereochemistry.



RN 887607-44-5 CAPLUS

CN Idopyranose, 2,6-diacetamido-1-(benzylsulfonyl)-1,2,6-trideoxy-,
α-L- (7CI) (CA INDEX NAME)

Absolute stereochemistry.



L38 ANSWER 27 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN

TI The methylation of N-acetylglucosamine derivatives

AB With MeI and BaO in HCONMe₂ permethylation in 1 operation is possible; good yields of the O-Me ether of β-Et and α-benzyl-N-acetyl-D-glucosaminide as well as of N-acetylglucosaminol are obtained. Thus, in a 3-necked flask with stirrer was refluxed 5 g. β-ethyl-N-acetyl-D-glucosaminide in 50 cc. HCONMe₂ (dried over BaO), 15 cc. MeI, and 18.4 g. finely powdered BaO, the spontaneous rise in temperature being controlled by stirring and cooling so that the temperature was kept at 40-5°. After another hr. the temperature fell to 23° and stirring was continued 5.5 hrs. The resulting thin, yellow paste added to 500 cc. CHCl₃, filtered by suction, and shaken 3 times with 100 cc. H₂O became colorless; the washings extracted 3 times with 50-cc. portions of CHCl₃, dried over Na₂SO₄, and evaporated in vacuo yielded 4.8 g. crystalline β-Et 3,4,6-trimethyl-N-acetyl-D-glucosaminide (I), m. 190-1° (EtOAc), [α]₂₀^D 5.9° and 5.6° (different preps.) (c 2, CHCl₃), -16.7° (c 2, MeOH), unchanged by recrystn. from C₆H₆. A similar experiment carried out without cooling resulted in a temperature rise in 1.5 hrs. to 87°, which dropped slowly, and after 3.5 hrs. was obtained 4.7 g. crude product yielding on recrystn. from EtOAc 3.3 g. product, m. 191°. When HCONMe₂ (containing 0.5% H₂O) was used, the crude yield was 5.6 g.; the temperature rose to 95° after 52 min., fell to 66°, and the mixture was shaken 3.5 hrs. The recrystd. product (3.2 g.) m. 191-2°. I (500 mg.) refluxed 15 hrs. with 50 cc. N HCl, treated with bone black in vacuo at a low temperature, and washed many times with H₂O before drying gave 280 mg. 3,4,6-tri-O-methyl- D-glucosamine-HCl (II), becoming brown at 200° without melting (MeOH-Et₂O), [α]₂₀^D 51.9° (initial) → 99.6° (c 1, H₂O).

N-Acetylactosamine (6 g. synthetic product, mol. weight 415 with 1 MeOH) in 50 cc. H₂O treated with 1.1 g. KBH₄, kept at room temperature 2 hrs. until a slightly acidified test solution no longer reduced Fehling solution, the K ions removed by Amberlite IR-120(H⁺), the excess KBH₄ decomposed (very little H evolution), and the mixture evaporated to dryness, first in vacuo, then treated many times with MeOH until no green color (test for B) was obtained yielded 5.4 g. N-acetylactosaminol (III), C₁₄H₂₇NO₁₁. III (1.50 g.) in 20 cc. dried HCONMe₂ was treated with 13.3 g. MeI (3 times theory) and 7.2 g. finely powdered BaO and shaken under anhydrous conditions; the mixture became

warm gradually at first, then the temperature rose suddenly after about 1 hr. and cooling was necessary to maintain it at 40-5°; after 50-60 min., the action slackened and the reaction was completed in 4-5 hrs. The process described for the preparation of II was carried out giving 1.75 g. crude octamethyl-N-acetylactosaminol (1,3,5,6-tetra-O-methyl-2-deoxy-2-acetamido-4[2,3,4,6-tetra-O-methyl-D-galactopyranosyl]-D-sorbitol (IV), b. 200-10° (bath temperature); the pure product (1.50 g. after many distns.) b_{0.001} 205-10°, [α]_{20D} -18.6° (c 1.4, CHCl₃), n_{20D} 1.4672. Acetyl-D-glucosamine (30 g.) in 120 cc. PhCH₂OH (distilled over CaO, containing 0.5% HCl) heated to boiling under reflux 30 min., dry Et₂O added to the cooled solution with vigorous shaking, the dark oily precipitate removed from the first Et₂O extract by decantation, and 2.5-4 vols. Et₂O added precipitated 30 g. light brown powder, which filtered off, washed several times with Et₂O, and recrystd. from about 150 cc. hot EtOH yielded about 18 g. α-benzyl-N-acetyl-D-glucosaminide (V), m. 183-4° (EtOH), [α]_{23D} 168.5° (c 1, H₂O) [the corresponding β-form m. 205-6°, [α]_{20D} -48° (H₂O) (C.A. 49, 2332f)]. α-Benzyl glucoside (10 g.) and 10 g. finely powdered anhydrous ZnCl₂ dissolved under anhydrous conditions in 35 cc. BzH at 60°, shaken 7-10 min., then kept at the same temperature 30 min., shaken well with 3 vols. H₂O, and the precipitate from the brown reaction mixture filtered by suction,

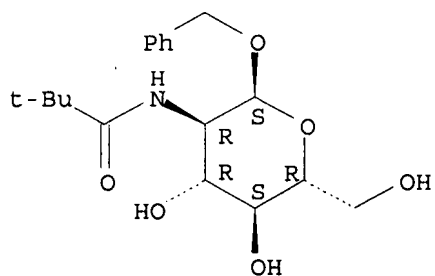
washed with H₂O, then 20 cc. EtOH, and digested with 200 cc. dry Et₂O yielded 9.4 g. almost colorless crude product, which recrystd. from 120 cc. hot C₅H₅N followed by 1-1.5 vols. hot H₂O, and cooled yielded fine needles which were washed with 60 cc. C₅H₅N-H₂O then with H₂O. The yield of α-benzyl N-acetyl-4,6-benzylidene-D-glucosaminide (VI) was 6.7-7.9 g., after 2 more crystns. from C₅H₅N-H₂O, VI m. 262° (decomposition), [α]_{23D} 114° (c 1.1, C₅H₅N). VI (150 mg.) dissolved in 2 cc. dry HCONMe₂ with warming, treated with 0.5 cc. MeI and 0.5 g. BaO, shaken occasionally at room temperature 30 min., then warmed on a water bath 2 hrs. under reflux at 40-5°, the paste stirred occasionally with a glass rod, the excess MeI removed in vacuo after 2 hrs. on the gradually cooling water bath, the residue treated with 10 cc. ice H₂O containing a drop of phenolphthalein solution, stirred well while dilute

HCl was added until all particles were free from alkali, and the yellow crystalline residue quickly filtered off, washed with H₂O, and covered with C₅H₅N to remove the brown color formed by air gave 149 mg. crystalline α-benzyl-N-acetyl-3-(O-methyl)-3,4,6-benzylidene-D-glucosaminide (VII), recrystd. from hot C₅H₅N and a little hot H₂O and dried (130°/3 mm., P₂O₅) yielding 133.5 mg. product, colorless needles, m. 272°, [α]_{20D} 96° (c 1, C₅H₅N); after repeated recrystn. it m. 273° (PhMe), 271° (BuOH). VI (5.8 g.) in 50 cc. absolute C₅H₅N cooled to -20°, treated dropwise with 3.5 cc. BzCl, kept 20 min. at -20° and 15 hrs. at 4°, then diluted with 500 cc. CHCl₃, shaken 3 times with ice water, ice-cold 2N H₂SO₄, saturated NaHCO₃ solution, and again with ice water, the organic phase dried with Na₂SO₄ and the white, crystalline solid, recrystd. from 250 cc. C₆H₆ yielded 5.95 g. α-benzyl-N-acetyl-3-benzoyl-4,6-benzylidene-D-glucosaminide (VIII), m. 218-20°, [α]_{21D} 44° (c 1, C₅H₅N); by the addition of ligroine, 0.6 g. was recovered from the mother liquor, giving a total of 90%. VIII (5.9 g.) dissolved in 180 cc. AcOH on the steam bath, treated under reflux with 120 cc. H₂O, heated 30 min., the BzH split off, and AcOH

removed in vacuo (bath temperature 40°), and the residue then evaporated many times with H₂O and PhMe yielded from C₆H₆ 3 g. α-benzyl-N-acetyl-3-benzoyl-D-glucosaminide (IX), [α]₂₃^D 104° (C₅H₅N). The first crude product, [α] 96°, m. 80-3°, after several recrystns. from C₆H₆, m. 95-7°, [α]₂₃^D 106° (c 1, C₅H₅N). IX (750 mg.) was shaken with 20 cc. HCONMe₂, 11 cc. MeI, and 10 g. Ag₂O 40 hrs. at room temperature, centrifuged, the solid phase washed twice with HCONMe₂, the solution treated with 5 vols. CHCl₃, kept overnight at 4°, the precipitate of Me₄NI.2AgI filtered off, and the filtrate shaken 4 times with H₂O, dried, evaporated in vacuo, and the oily residue chromatographed and eluted with ligroine (b. 70-80), 1:1 ligroine-Et₂O, and 1:1 Et₂O-Et₂Ac; the Et₂O contained 176 mg. optically active product, [α]₂₅^D 105° (c 2, CHCl₃). After removal of the Bz group with MeOHNH₃, a sublimate of BzNH₃ was obtained at 100°/10-3 mm. and also a distillate at 180°, giving an unsatisfactory analysis for benzyldi(O-methyl)-N-acetylglucosaminide (X). In another experiment 3 g. IX was shaken with 8 cc. HCONMe₂, 30 cc. MeI, and 30 g. Ag₂O 15 hrs. at room temperature, and the pasty mixture treated with excess CHCl₃ and worked up as before. Half of the product from CHCl₃ was distilled in a high vacuum immediately and an appreciable amount of HCONMe₂ appeared in the receiver; 2 distns. (5 + 10-3 mm., 160-180° bath temperature) gave 0.95 g. α-benzyl-N-acetyltrimethylglucosaminide, colorless oil, specific rotation 153° (c 2, CHCl₃), C₁₈H₂₇NO₆, which soon crystallized; recrystn. from 4:1 Et₂OMeOH gave a product, m. 151-2° (sintering at 147°), [α]₂₃^D 148° (c 2 and 0.5, CHCl₃).

AN 1958:65656 CAPLUS <<LOGINID::20071128>>
 DN 52:65656
 OREF 52:11750g-i,11751a-i,11752a-c
 TI The methylation of N-acetylglucosamine derivatives
 AU Kuhn, Richard; Baer, Hans Helmut; Seeliger, Annemarie
 SO Ann. (1958), 611, 236-41
 DT Journal
 LA Unavailable
 IT 909257-27-8P, Glucosaminide, benzyl N-acetyltrimethyl-, α-D-
 RL: PREP (Preparation)
 (preparation of)
 RN 909257-27-8 CAPLUS
 CN Glucosaminide, benzyl N-acetyltrimethyl-, α-D- (6CI) (CA INDEX NAME)

Absolute stereochemistry.

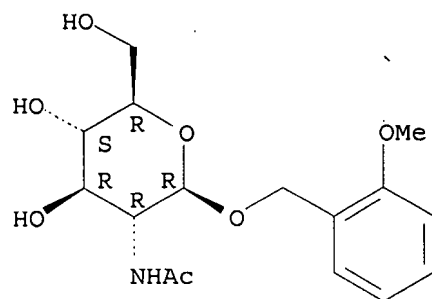


L38 ANSWER 28 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI The 1-halo derivative of D-glucosamines
 AB Treatment of β-pentaacetyl-D-glucosamine with ethereal HCl resulted in the formation of 1-chloro-3,4,6,N-tetraacetyl-D-glucosamine (I), m. 133-4°, [α]₂₀^D 120° (c 2, CHCl₃). I was converted with o-methoxybenzyl alc. to 1-β-o-methoxybenzyl-3,4,6,N-tetraacetyl-D-glucosaminide, m. 165-6°, [α]₂₀^D -37.5°. Saponification of the O-Ac group with methanolic NH₃ yielded 1-β-o-methoxybenzyl-N-

acetyl-D-glucosaminide, m. 210-11°, [α]_{20D} -56.6° (c 1.5, H₂O). The β -Me and β -benzyl comps. were prepared similarly. The structures were confirmed with infrared spectra.

AN 1957:29715 CAPLUS <<LOGINID::20071128>>
 DN 51:29715
 OREF 51:5706i,5707a
 TI The 1-halo derivative of D-glucosamines
 AU Morel, Ch. J.
 CS J. R. Geigy A.-G., Basel, Switz.
 SO Experientia (1956), 12, 419-20
 CODEN: EXPEAM; ISSN: 0014-4754
 DT Journal
 LA German
 IT 906351-71-1P, Glucosaminide, o-methoxybenzyl N-acetyl-, β -D-
 RL: PREP (Preparation)
 (preparation of)
 RN 906351-71-1 CAPLUS
 CN Glucopyranoside, o-methoxybenzyl-2-acetamido-2-deoxy-, β -D- (6CI)
 (CA INDEX NAME)

Absolute stereochemistry.



L38 ANSWER 29 OF 29 CAPLUS COPYRIGHT 2007 ACS on STN
 TI Glucosaminides
 AB Pentaacetylglucosamine, prepared by the method of Lobry de Bruyn and van Ekenstein [Rec. trav. chim. 18, 83(1899)], 2-4.4 moles guaiacol, o-cresol, 1- or 2-naphthol, or m-O₂NC₆H₄NO₂, and 0.021 mole p-MeC₆H₄SO₃H or 0.52 mole ZnCl₂, melted together and stirred 45 min. to 2 hrs., cooled, extracted with CHCl₃ the extract washed with 2 N NaOH, the CHCl₃ removed in vacuo, and the residue recrystd. from alc. gave the following new tetraacetyl- β (?)-D-glucosaminides [read compound, m.p., [α]_D (CHCl₃), % yield]: guaiacyl 177-8°, -25.2°, 5.9; o-tolyl 189-90°, 0°, 9.4; 1-C₁₀H₇, 207-8°, -58.4°, 8.7; 2-C₁₀H₇, 214-15°, -24.6°, 8.9; m-O₂NC₆H₄ 234-5°, -, 2.3. All are soluble in EtOH, MeOH, Me₂CO, CHCl₃, and AcOH, insol. in C₆H₆, Et₂O, and H₂O, taste bitter, and do not reduce Fehling solution. They were hydrolyzed by Ba(OH)₂, in alc. N NaOH in Me₂CO or MeONa to the corresponding N-acetyl- β (?)-D-glucosaminides, m. 230°, 244-5°, 246-7°, 238-9°, resp., soluble in hot absolute EtOH, absolute MeOH, AcOH, and H₂O, and taste bitter, do not reduce Fehling solution
 AN 1952:66827 CAPLUS <<LOGINID::20071128>>
 DN 46:66827
 OREF 46:11116e-h
 TI Glucosaminides
 AU Fujise, Shin-ichiro; Yokoyama, Kin-ich
 CS Tohoku Univ., Sendai
 SO Nippon Kagaku Kaishi (1921-47) (1951), Pure Chem. Sect. 72, 728-31
 CODEN: NIKWAB; ISSN: 0369-4208

DT Journal
LA Unavailable
IT 911479-41-9P, Glucoside, o-methoxyphenyl 2-acetamido-2-deoxy-,
β-D-
RL: PREP (Preparation)
(preparation of)
RN 911479-41-9 CAPLUS
CN Glucoside, o-methoxyphenyl 2-acetamido-2-deoxy-, β-D- (5CI) (CA
INDEX NAME)

Absolute stereochemistry.

